84-694

No. ———

Office - Supreme Court, U S
FILED
OCT 31 1984
ALEXANDER L. STEVAS
CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1984

———

ARKANSAS POWER & LIGHT COMPANY, *et al.*,
Petitioners,

v.

UNION OF CONCERNED SCIENTISTS, *et al.*,
Respondents.

———

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

———

JAY E. SILBERG
Counsel of Record
ROBERT E. ZAHLER
SHAW, PITTMAN, POTTS
& TROWBRIDGE
1800 M Street, N.W.
Washington, D.C. 20036
Tel.: (202) 822-1000
Attorneys for Petitioners

October 31, 1984

WILSON - EPES PRINTING CO., INC. - 789-0096 - WASHINGTON, D.C. 20001

10 pp

QUESTION PRESENTED

Whether the United States Court of Appeals for the District of Columbia Circuit improperly restricted the Nuclear Regulatory Commission's authority to control the timing and scope of its public hearings on applications for nuclear power plant operating licenses, by directing the Commission to hold hearings on the results of emergency planning exercises, notwithstanding the Commission's regulatory finding that emergency planning exercises constitute pre-operational inspections which need not be completed prior to public hearings on the adequacy of emergency plans.*

---

* In addition to Arkansas Power & Light Company, the petitioners include Carolina Power & Light Company, The Cleveland Electric Illuminating Company, Duquesne Light Company, Georgia Power Company, Kansas City Power & Light Company, Kansas Electric Power Cooperative, Inc., Kansas Gas and Electric Company, Louisiana Power & Light Company, Mississippi Power & Light Company, New Orleans Public Service, Inc. and Union Electric Company.

Arkansas Power & Light Company, Louisiana Power & Light Company, Mississippi Power & Light Company and New Orleans Public Service, Inc. are subsidiaries of Middle South Utilities, Inc. Middle South Energy, Inc. and Middle South Services, Inc. also are subsidiaries of Middle South Utilities, Inc.

Georgia Power Company is a subsidiary of The Southern Company. Alabama Power Company, Gulf Power Company, Mississippi Power Company, Southern Company Services, Inc. and Southern Electric International, Inc. also are subsidiaries of The Southern Company.

In addition to the parties listed as respondents in the caption of this petition, the Nuclear Regulatory Commission and the United States of America were respondents in the court below. The Attorney General of Massachusetts was an intervenor-petitioner in the court below.

TABLE OF CONTENTS

	Page
QUESTION PRESENTED	i
TABLE OF CONTENTS	iii
TABLE OF AUTHORITIES	v
OPINIONS BELOW	1
JURISDICTION	2
STATUTES AND REGULATIONS INVOLVED	2
STATEMENT OF THE CASE	3
REASONS FOR GRANTING THE WRIT	10
I. The Court of Appeals' Resolution of the Important Question of Federal Law Presented by this Case is in Conflict with Decisions of this Court	12
II. The Decision Below Will Have a Significant and Widespread Adverse Impact	19
CONCLUSION	23
APPENDIX A: Opinion of the Court of Appeals, issued May 25, 1984	1a
APPENDIX B: Orders of the Court of Appeals denying Petition for Rehearing and Suggestion for Rehearing *en banc*, issued August 3, 1984	40a
APPENDIX C: Final Rule on Emergency Planning and Preparedness of the Nuclear Regulatory Commission, issued August 11, 1980	42a

TABLE OF CONTENTS—Continued

		Page
APPENDIX D:	Final Rule on Emergency Planning and Preparedness of the Nuclear Regulatory Commission, issued July 8, 1982	70a
APPENDIX E:	Denial by the Nuclear Regulatory Commission of the Union of Concerned Scientists' Petition for Rulemaking, issued April 12, 1983	90a
APPENDIX F:	Pertinent Sections of the Atomic Energy Act	104a
APPENDIX G:	Pertinent Nuclear Regulatory Commission Regulations	105a

TABLE OF AUTHORITIES

CASES: Page

Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., —— U.S. ——, 103 S. Ct. 2246 (1983) 11

BPI v. AEC, 502 F.2d 424 (D.C. Cir. 1974) 13

Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc., —— U.S. ——, 104 S. Ct. 2778 (1984) 11, 18

Cities of Statesville v. AEC, 441 F.2d 962 (D.C. Cir. 1969) (*en banc*) 13

Door v. Donaldson, 195 F.2d 764 (D.C. Cir. 1952) .. 22

Easton Utilities Commission v. AEC, 424 F.2d 847 (D.C. Cir. 1970) (*en banc*) 13

FPC v. Texaco, Inc., 377 U.S. 33 (1964) 12

ICC v. Jersey City, 322 U.S. 503 (1944) 14

Phelps Dodge Corp. v. NLRB, 313 U.S. 177 (1941) .. 17

Power Reactor Development Co. v. International Union of Electrical Workers, 367 U.S. 396 (1961) 17

Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968) 11

United States v. Shimer, 367 U.S. 374 (1961) 18

United States v. Storer Broadcasting Co., 351 U.S. 192 (1956) 10, 12-14

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519 (1978) 11, 12, 23

ADMINISTRATIVE CASES:

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 N.R.C. 2069 (1982) 6

Houston Lighting & Power Co. (South Texas Project, Units 1 and 2), LBP-81-54, 14 N.R.C. 918 (1981) 5

STATUTES:

Administrative Procedure Act, § 4(a)(3), 5 U.S.C. § 554(a)(3) (1982) 10

TABLE OF AUTHORITIES—Continued

	Page
Federal Water Power Act,	
16 U.S.C. §§ 792-823a (1982)	14
28 U.S.C. § 1254(1) (1982)	2
28 U.S.C. § 2342(4) (1982)	9
Atomic Energy Act of 1954,	
§ 3(d), 42 U.S.C. § 2013(d) (1982)	18
§ 101, 42 U.S.C. § 2131 (1982)	4
§ 161(b), 42 U.S.C. § 2201(b) (1982)	4, 13
§ 182(a), 42 U.S.C. § 2232(a) (1982)	4
§ 189, 42 U.S.C. § 2239 (1982)	2, 5, 9, 10
National Environmental Policy Act,	
42 U.S.C. §§ 4321-4335 (1982)	12
LEGISLATIVE MATERIAL:	
Atomic Energy Commission, *Legislative History of the Atomic Energy Act of 1954* (1955)	14
S. Rep. No. 113, 97th Cong., 1st Sess. (1981)	19, 20
Staff of Joint Comm. on Atomic Energy, 87th Cong., 1st Sess., *Improving the AEC Regulatory Process* (Joint Comm. Print 1961)	15-16, 19
AEC Licensing Procedures and Related Legislation: Hearings Before the Subcomm. on Legislation of the Joint Comm. on Atomic Energy, 92d Cong., 1st Sess. (1971)	17
Nuclear Power Plant Licensing Delays and the Impact of the Sholly Versus NRC Decision: Hearings Before the Subcomm. on Nuclear Regulation of the Senate Comm. on Environment and Public Works, 97th Cong., 1st Sess. (1981)	19
To Amend the Atomic Energy Act of 1954 Regarding the Licensing of Nuclear Facilities: Hearings on H.R. 13731 and H.R. 13732 Before the Joint Comm. on Atomic Energy, 92d Cong., 2d Sess. (1972)	17
REGULATIONS AND REGULATORY MATERIAL:	
10 C.F.R. § 1.64 (1984)	6-7
10 C.F.R. § 2.104(c) (1984)	5

TABLE OF AUTHORITIES—Continued

	Page
10 C.F.R. § 2.758 (1984)	5
10 C.F.R. § 2.760a (1984)	5
10 C.F.R. § 2.764(f) (1984)	6
10 C.F.R. § 50.1 (1984)	5
10 C.F.R. § 50.30 (1984)	5
10 C.F.R. § 50.33 (1984)	5, 7
10 C.F.R. § 50.34 (1984)	5
10 C.F.R. § 50.36 (1984)	5
10 C.F.R. § 50.36a (1984)	5
10 C.F.R. § 50.40 (1984)	5
10 C.F.R. § 50.42 (1984)	5
10 C.F.R. § 50.43 (1984)	5
10 C.F.R. § 50.46 (1984)	5
10 C.F.R. § 50.47 (1984)	2-3, 5, 7, 8
10 C.F.R. § 50.48 (1984)	5
10 C.F.R. § 50.49 (1984)	5
10 C.F.R. § 50.50 (1984)	5
10 C.F.R. § 50.54 (1984)	5
10 C.F.R. § 50.55a (1984)	5
10 C.F.R. Part 50, Appendix E (1984)	2-3, 7
35 Fed. Reg. 5,317 (March 31, 1970)	16
45 Fed. Reg. 55,402 (August 19, 1980)	1
46 Fed. Reg. 17,216 (March 18, 1981)	19
47 Fed. Reg. 30,232 (July 13, 1982)	2
48 Fed. Reg. 16,691 (April 19, 1983)	2

MISCELLANEOUS:

Nucleonics Week, September 6, 1984	17
U.S. Nuclear Regulatory Commission, *Final Environmental Statement Related to Operation of Seabrook Station, Units 1 and 2* (NUREG-0895, 1982)	20
U.S. Nuclear Regulatory Commision, *Regulatory Guide 1.68: Initial Test Programs for Water-Cooled Nuclear Power Plants* (Rev. 2, 1978)	7, 22
12 U.S. Nuclear Regulatory Commission, *Regulatory Licensing Status Summary Report for December 1-Decmber 31, 1983* (NUREG-0580, 1984)	20-21

IN THE

Supreme Court of the United States

OCTOBER TERM, 1984

No. ————

ARKANSAS POWER & LIGHT COMPANY, *et al.*,
Petitioners,

v.

UNION OF CONCERNED SCIENTISTS, *et al.*,
Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

Arkansas Power & Light Company and eleven other electric utility companies ("petitioners") hereby petition for a writ of certiorari to review the judgment and opinion of the United States Court of Appeals for the District of Columbia Circuit entered in this case.

OPINIONS BELOW

The opinion of the court of appeals, with a dissenting opinion filed by Judge MacKinnon (App. A, pp. 1a-39a, *infra*),[1] is reported at 735 F.2d 1437 (D.C. Cir. 1984). The administrative opinion and regulation, as originally issued by the Nuclear Regulatory Commission ("NRC") (App. C, pp. 42a-69a, *infra*), and as amended for purposes of clarification (App. D, pp. 70a-89a, *infra*), appear at 45 Fed. Reg. 55,402-13 (August 19, 1980) and

---

[1] "App." references are to the Appendix attached to this Petition.

47 Fed. Reg. 30,232-36 (July 13, 1982), respectively. The NRC's denial of the Union of Concerned Scientists' petition to further amend the rule (App. E, pp. 90a-103a, *infra*) appears at 48 Fed. Reg. 16,691-95 (April 19, 1983).

JURISDICTION

The judgment of the court of appeals was entered on May 25, 1984. A timely petition for rehearing and suggestion for rehearing *en banc* filed by the NRC and the United States of America were denied on August 3, 1984 (App. B, pp. 40a-41a, *infra*); Judges MacKinnon, Wilkey and Scalia dissented fro ı those orders. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1) (1982).

STATUTES AND REGULATIONS INVOLVED

Section 189(a)(1) of the Atomic Energy Act of 1954, as amended (42 U.S.C. § 2239(a)(1) (1982)), provides in relevant part:

> In any proceeding under this chapter, for the granting . . . of any license . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.

Part 50 of the NRC's Rules and Regulations (10 C.F.R. § 50.47(a)(2) and 10 C.F.R. Part 50, Appendix E, § IV.F.1 (1984)) provides in relevant part:

> Section 50.47(a)(2). The NRC will base its finding on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented . . . . A FEMA finding will primarily be based on a review of the plans. Any other information already available to FEMA may be considered in assessing whether there is reasonable assurance that the plans can be imple-

> mented . . . . Emergency preparedness exercises (required by paragraph (b)(14) of this section and Appendix E, Section F of this part) are part of the operational inspection process and are not required for any initial licensing decision.
>
> Part 50, Appendix E, § IV.F.1. A full participation exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located for which the first operating license for that site is issued after July 13, 1982. This exercise shall be conducted within 1 year before the issuance of the first operating license for full power and prior to operation above 5% of rated power of the first reactor, and shall include participation by each State and local government within the plume exposure pathway EPZ [Emergency Planning Zone] and each State within the ingestion exposure pathway EPZ. [Footnote omitted.]

The complete texts of the pertinent provisions of the Atomic Energy Act and the NRC's emergency preparedness regulations are reproduced as Appendices F, p. 104a, *infra*, and G, pp. 105a-128a, *infra*, respectively.

STATEMENT OF THE CASE

This case presents the question whether the NRC has authority to control the timing, scope and number of public hearings which it must hold on applications for nuclear power plant operating licenses. Until the court of appeals' decision, the NRC had exercised this authority unquestioned. Because its decisions to authorize the operation of a nuclear power plant are based on a *prediction* that the plant can be safely operated rather than on the plant's actual performance, the NRC has held its hearings prior to completion of pre-operational testing and inspections. In keeping with this practice, the NRC issued a rule on emergency preparedness providing that hearings on emergency planning issues

would focus on the adequacy of the *plans* and need not await their testing through pre-operational exercises. The United States Court of Appeals for the District of Columbia Circuit invalidated the rule, holding that the Atomic Energy Act prohibited the agency from excluding the exercises from the licensing hearing. As a result of the court's decision, the NRC would be required to hold supplemental hearings on emergency plan exercises in all licensing cases where a hearing is requested. The effect will be to impose delay costs on utility customers ranging from hundreds of millions to billions of dollars.

1. Under the terms of the Atomic Energy Act, before a nuclear power plant can begin operating, the utility must obtain an NRC operating license. 42 U.S.C. § 2131 (1982). The Act, however, delegates the NRC broad discretion to structure its operating licensing proceedings to ensure the public health and safety. The Act directs the utility to submit such technical and other information "as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization . . . of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public." 42 U.S.C. § 2232(a) (1982). In order to effectuate this purpose, the Act further authorizes the NRC to "establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material . . . as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property." 42 U.S.C. § 2201(b) (1982). Thus, the Act delegates to the NRC both the authority to specify through rule or order what is necessary to meet the broad statutory criteria and the authority to determine whether the application satisfies the regulatory criteria.

Pursuant to these statutory directives, the NRC has at Part 50 of its regulations adopted comprehensive rules

governing the licensing of nuclear power plants. *See* 10 C.F.R. Part 50 (1984). Among other matters, these rules specify in great detail the information that a utility must supply to the NRC in support of an application to operate a nuclear power plant and the criteria or standards that the NRC will use in determining whether to grant such operating authority.[2] Upon determining that an application meets the specified standards, the NRC will issue an operating license. 10 C.F.R. § 50.50 (1984).

The Atomic Energy Act does not require a public hearing on an operating license application; only upon the request of an interested party need such a hearing be held. 42 U.S.C. § 2239(a)(1) (1982). Nor does the Act define what constitutes an appropriate "request." The NRC has provided this definition by regulation. Thus, the NRC has limited the scope of an operating license hearing to the specific issues contested by the participants. *See* 10 C.F.R. §§ 2.104(c), 2.760a (1984).[3] Also by regulation, the NRC has excluded from the hearing challenges to regulatory standards. 10 C.F.R. § 2.758(a) (1984).[4] The effect of these regulations is to

---

[2] Relevant regulations include: 10 C.F.R. §§ 50.1, 50.30, 50.33, 50.34, 50.36, 50.36a, 50.40, 50.42, 50.43, 50.46, 50.47, 50.48, 50.49, 50.50, 50.54, 50.55a (1984).

[3] The regulations also provide that the officer presiding at the hearing may consider *sua sponte* "serious safety, environmental, or common defense and security matters" not raised by the parties. *Id.* In recent years, the NRC has directed its licensing boards to use this authority sparingly. *See, e.g., Houston Lighting & Power Co.* (South Texas Project, Units 1 and 2), LBP-81-54, 14 N.R.C. 918, 922-23 & n.4 (1981).

[4] As a result of this rule, "no evidence may be received . . . and no discovery, cross-examination or argument directed to the matter will be permitted, and the presiding officer may not further consider the matter." 10 C.F.R. § 2.758(c) (1982). The sole exception is a petition showing "special circumstances" that must be approved by both the presiding officer and the Commissioners. 10 C.F.R. § 2.758(b) & (d) (1984).

exclude at the outset of a proceeding many of the issues sought to be litigated by parties requesting a hearing. *See, e.g., Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 N.R.C. 2069-114 (1982).

The three-member licensing board conducting the hearing is directed to hear and decide the issues properly before it and to indicate in its decision "the type of licensing action, if any, which [its] decision would authorize." 10 C.F.R. § 2.764(f)(1)(i) (1984). Since the Three Mile Island accident, all licensing board decisions authorizing full-power operation of a nuclear power plant have been subject to an additional, special review by the NRC Commissioners. 10 C.F.R. § 2.764(f)(2) (1984). The purpose of this review is to permit the Commissioners to "review the matter on its own motion to determine whether to stay the effectiveness of the [licensing board] decision." *Id.*[5]

Although approval by the licensing board and the NRC Commissioners is a prerequisite to issuance of a full-power operating license, the actual issuance does not automatically follow; the license is additionally contingent upon successful completion of extensive, pre-operational testing and inspection of the facility. The NRC staff is charged with responsibility to monitor and certify the successful completion of this testing and inspection program. *See, e.g.*, 10 C.F.R. § 1.64 (1984) ("The Office of Inspection and Enforcement develops policies and administers programs for: . . . inspecting applicants for licenses, as a basis for recommending

---

[5] In deciding whether to stay the full-power authorization granted by the licensing board, the Commissioners will consider "the gravity of the substantive issue, the likelihood that it has been resolved incorrectly below, the degree to which correct resolution of the issue would be prejudiced by operation pending review, and other relevant public interest factors." *Id.*

issuance or denial of . . . an operating license . . . ."). These final measures are designed to confirm the staff's, the board's, and the Commissioners' predicted findings that operation can occur safely. Typically, the license is issued upon completing a required set of tests and inspections. However, the NRC conditions the license to require additional tests to be performed after license issuance and start-up of the facility and before commercial operation of the plant. Failure to satisfy these further tests may result in limiting operation of the plant or suspension of the operating license.[6]

2. Following the 1979 accident at Three Mile Island, the NRC began an extensive reconsideration of its existing regulations governing on-site and off-site plans for responding to radiological emergencies. The revised rule, adopted in 1980 after notice and opportunity for written and oral public comment (App. C), requires the applicant to submit its written emergency plan, along with the state and local governmental response plans, to the NRC for evaluation. 10 C.F.R. § 50.33(g) (1984). The rule established sixteen planning standards which emergency plans must satisfy as a condition to issuance of a license. The plans, for example, must describe a clear delineation of responsibility between the licensee, the state, and the local government(s); procedures for prompt notification of responsible personnel; adequate emergency facilities; means for controlling radiological exposures; and exercises to test emergency response capabilities. 10 C.F.R. § 50.47(b) (1984). For new plants, a full participation exercise must be conducted within one year before issuance of the full-power operating license and periodically thereafter. 10 C.F.R. Part 50, Appendix E, § IV.F.1 (1984).

---

[6] *See generally* U.S. Nuclear Regulatory Commission, *Regulatory Guide 1.68: Initial Test Programs for Water-Cooled Nuclear Power Plants* (Rev. 2, 1978) [hereinafter cited as *Reg. Guide 1.68*].

On July 8, 1982, again after notice and comment (App. D), the NRC amended its emergency planning regulation to provide the following clarification:

> Emergency preparedness exercises . . . are part of the operational inspection process and are not required for any initial licensing decision.

10 C.F.R. § 50.47(a)(2) (1984). The NRC stated that its intent in modifying the rule was "to clarify that the findings on emergency planning required prior to license issuance are *predictive* in nature and need not reflect the actual state of preparedness at the time the finding is made." (App. D at 70a-71a) (emphasis added). The Commission found that it would be premature to conduct exercises early enough in the licensing process to permit the outcome of the exercises to be fully litigated, since the operating personnel are unlikely to then be on site and the hardware may not yet be completed. (App. D at 75a, 82a-83a).

The Commission emphasized that the sixteen planning standards were unchanged by the amendment and that all interested parties retained the right to participate in development of the plans, contest the adequacy of the plans in the public hearing process, and observe the actual exercises. (App. D at 74a-75a, 76a). It further stated that if the actual conduct of the exercise identified "fundamental defects" in the plans, a party could seek to reopen the hearing or petition for rescission of the license. (App. D at 76a-77a).

Following promulgation of the amendment, the Union of Concerned Scientists ("UCS") petitioned the NRC to again amend the rule to provide for a hearing on the results of the on-site and off-site exercises. The Commission denied the petition (App. E), explaining that "[a]s to all matters of public health and safety, the licensing boards' findings are predictive in that they often are based upon the design of the facility . . . per-

formance specifications, etc., rather than demonstrated performance." (App. E at 93a). The Commission also noted that it "has the discretion to separate matters which properly belong in the licensing phase from those which belong in the post-adjudicative operational phase." (App. E at 100a).

3. Virtually contemporaneous with filing its rulemaking request, UCS petitioned the Court of Appeals for the District of Columbia Circuit, pursuant to the jurisdiction conferred by 28 U.S.C. § 2342(4) and 42 U.S.C. § 2239(b) (1982), to invalidate the amended regulation. UCS contended that Section 189(a)(1) of the Act requires the Commission to hold a public hearing on the results of the emergency planning exercises. In a split decision issued on May 25, 1984, the Court of Appeals granted the petition and vacated the amendment. (App. A).

The panel majority premised its decision on a "literal" interpretation of Section 189(a)(1), which, in its view, contemplates that "a requirement of the [NRC's] ultimate licensing decision . . . must be subject to the section 189(a) hearing requirement." (App. A at 11a). The court acknowledged that the NRC "has great discretion to decide what matters are relevant" to the licensing decision. (App. A at 19a). It declined, however, to accord the NRC similar discretion to limit the scope of the hearing with respect to issues which the NRC determines are relevant because Congress had not specifically exempted such issues when it had amended Section 189(a) in the past, and because it could perceive "no basis in the statute or legislative history" for such discretion. (App. A at 19a-22a).

The court of appeals also rejected the argument that emergency preparedness exercises are part of the preoperational testing process which traditionally has been excluded from the NRC hearing, or alternatively fall within the statutory exception from the adjudicatory

hearing requirement in the Administrative Procedure Act ("APA") for "tests and inspections." *See* 5 U.S.C. § 554(a)(3) (1982). (App. A at 25a-30a). The Court suggested that pre-operational tests necessarily involve specific "objective" criteria, whereas evaluation of emergency planning is governed only by generalized standards of adequacy. (App. A at 29a-30a).

Judge MacKinnon dissented. (App. A at 31a-39a). He explained that the regulation in issue makes clear that the required licensing finding is "predictive" in nature, and subjects only the plans themselves—not the plans' implementation—to the Section 189(a)(1) hearing requirement (App. A at 31a-33a, 36a-37a), and that it was "entirely reasonable" to treat planning exercises like other pre-operational testing. (App. A at 37a & n.5). He stated that the majority's decision impermissibly intrudes on the NRC's exclusive statutory authority to determine the substantive requirements for nuclear licensing. (App. A at 31a).

A petition for rehearing and suggestion for rehearing *en banc* filed by the NRC and the United States of America were denied on August 3, 1984. Judge McKinnon dissented from the denial of rehearing, and Judges Wilkey and Scalia dissented from the denial of rehearing *en banc*. (App. B).

REASONS FOR GRANTING THE WRIT

The decision of the court of appeals is irreconcilable with decisions of this Court upholding the authority of administrative agencies to adopt regulations necessary for the orderly conduct of their proceedings, even where the rules have the effect of narrowing the public's otherwise absolute statutory right to an adjudicatory hearing. *See, e.g., United States v. Storer Broadcasting Co.*, 351 U.S. 192 (1956). At the same time, the court of appeals' decision is contrary to the fundamental limitations placed on a reviewing court's authority to substitute its judg-

ment as to the proper interpretation of a statute for that of an administrative agency. *See Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, —— U.S. ——, 104 S. Ct. 2778 (1984). The court of appeals' cavalier disregard of these basic principles is especially egregious in the context of the Atomic Energy Act. As the District of Columbia Circuit itself has acknowledged, that statute is "virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." *Siegel v. AEC*, 400 F.2d 778, 783 (D.C. Cir. 1968). The court of appeals' usurpation of the NRC's authority to determine the appropriate scope of licensing proceedings warrants review by this Court. *E.g., Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 557-58 (1978); *Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, —— U.S. ——, 103 S. Ct. 2246, 2252 (1983).

Review of the court of appeals' decision also is appropriate because the question presented has tremendous practical significance. The cost to consumers and utilities of the delay in licensing caused by the need to hold hearings on the results of emergency planning exercises could easily exceed a billion dollars. The decision also is likely to have even broader ramifications. By requiring the NRC to include the results of exercises in its public hearings, the decision undermines the NRC's basic tenet that authorization of a license is premised on a *prediction* that a facility can be operated safely, rather than a review of actual operation of the plant. All preoperational tests and inspections, even the ones which occur the day before the reactor is ready to be licensed, become subject to the potential for delaying hearings. In addition, the adjudicatory proceedings of other agencies may be affected as well by the court's unduly re-

strictive interpretation of the "tests and inspections" exception to the APA.

I. The Court of Appeals' Resolution of the Important Question of Federal Law Presented by this Case is in Conflict with Decisions of this Court

It has been almost thirty years since this Court first instructed the Court of Appeals for the District of Columbia Circuit that a statutory hearing requirement should not be read as "withdrawing from the power of [an agency] the rulemaking authority necessary for the orderly conduct of its business." *United States v. Storer Broadcasting Co., supra*, 351 U.S. at 202 (upholding a Federal Communications Commission regulation which absolutely denied a hearing for certain categories of licensees, notwithstanding a requirement for a "full hearing" in the Communications Act of 1934). During the next decade, the Court had occasion to reaffirm an agency's authority to limit a statutory right to a hearing, affirming a Federal Power Commission ("FPC") regulation which "particulariz[ed] statutory standards . . . and bann[ed] at the threshold those who neither measure up to them nor show reasons why in the public interest the rule should be waived." *FPC v. Texaco, Inc.*, 377 U.S. 33, 39 (1964). More recently and more significantly still, this Court upheld application of the *Storer* principle in the context an NRC licensing proceeding. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., supra*, 435 U.S. at 554. The *Vermont Yankee* Court held that the Commission's establishment of a "threshold test" which energy conservation contentions must satisfy before they will be litigated was "well within the agency's discretion." *Id.*

Because the *Vermont Yankee* "threshold" arose in the context of the National Environmental Policy Act, 42 U.S.C. §§ 4321-4335 (1982), this Court focused its analysis on that statute. Hence, it did not directly ad-

dress whether the Atomic Energy Act accords the NRC the authority to limit an interested party's statutory right to a hearing.[7] The instant case squarely presents that question for resolution by this Court. The Court of appeals' decision should not be permitted to stand unreviewed. It is clear that the NRC must have the authority to decide that licensing hearings can be concluded before completion of pre-operational tests. Otherwise its proceedings will be subjected to interminable delays.

It is equally clear that the NRC does possess this authority, and that the decision below represents a stark departure from the *Storer* principle. The NRC has been granted the same broad authority to issue all regulations it deems "necessary or desirable", 42 U.S.C. § 2201(b) (1982), that the Court found sufficient to justify a limitation on the hearing right in *Storer*. *See* 351 U.S. at 201-05. The NRC's rule, like the one in *Storer*, also can be waived in appropriate circumstances—namely, when the emergency exercises indicate there are "fundamental defects" in the plan. *Compare* 351 U.S. at 205 *with* App. D at 76a-77a.

Indeed, perhaps the only salient distinction between the limitation placed on the public's right to a hearing in *Storer* and the one in issue here is that the *Storer* limitation is of a far greater magnitude. Under the threshold test at issue in *Storer*, an interested party

---

[7] The Court of Appeals for the District of Columbia Circuit has, however, considered whether under the Atomic Energy Act the NRC may limit an interested party's statutory right to a hearing. Prior to this case, the court of appeals had consistently held that Section 189(a) was not "the last word" on the right to a hearing, that "[o]ther factors are indeed relevant to Commission control of proceedings necessary to carry out the purposes of the Act." *BPI v. AEC*, 502 F.2d 424, 426-27 (D.C. Cir. 1974); *see also Cities of Statesville v. AEC*, 441 F.2d 962 (D.C. Cir. 1969) (*en banc*); *Easton Utilities Commission v. AEC*, 424 F.2d 847 (D.C. Cir. 1970) (*en banc*).

could be denied a hearing altogether. Here, by contrast, the public is given ample opportunity to litigate fully the adequacy of all on-site and off-site emergency response plans. The rule struck down by the court of appeals only affects a party's right to an *additional* hearing—one which focuses on an issue of implementation which the NRC has concluded is insufficiently probative of the emergency plans' adequacy to warrant the delay in start-up of the plant which would accompany an additional hearing. *Cf. ICC v. Jersey City*, 322 U.S. 503, 514 (1944) ("If litigants might demand rehearing as a matter of law because some new circumstance has arisen . . . there would be little hope that the administrative process would ever be consummated . . . .").

The court of appeals' precise basis for declining to follow *Storer* is not altogether clear. Although the applicability of *Storer* was briefed below, it was not even alluded to by the court. The court did state, however, that in its view the NRC's rule "upend[s] the balance struck by Congress between efficiency and public participation" (App. A at 19a), thereby suggesting that the exercise of the *Storer* authority here would be contrary to congressional intent. Both the court's analytical approach and its understanding of the Atomic Energy Act were seriously flawed.

a. It would be surprising indeed if the Atomic Energy Act, which was patterned on the FPC's enabling legislation,[8] did not accord the NRC the same authority which this Court in *Texaco* found Congress accorded to the FPC. The court of appeals premised its contrary conclusion on the fact that Congress amended Section 189(a) in 1962 and again in 1982 to delete the public hearing requirement in circumstances not relevant here, yet

---

[8] *See* Federal Water Power Act, ch. 285, 41 Stat. 1063 (1920) (codified at 16 U.S.C. §§ 792-823a (1982)); 3 Atomic Energy Commission, *Legislative History of the Atomic Energy Act of 1954*, at 3373, 3454 (1955).

did not specifically exempt post-hearing testing from the hearing provision. (App. A at 19a-22a).

The short answer is that there was no *need* for Congress to amend the Act to specifically vest the NRC with authority it already possessed. And while *Storer* makes clear that delegation of this authority need not be expressed, Congress in fact specifically urged the NRC to exercise its authority to forego multiple licensing hearings on post-hearing testing. Thus, the 1961 Staff Report of the Joint Committee on Atomic Energy, which prompted the 1962 statutory amendments, was sharply critical of the Commission's then existing practice of holding seriatim licensing hearings, the first to determine whether to issue a "provisional operating license" permitting low power testing, and subsequent ones to assess the results of various pre-operational tests and inspections.[9] The Report characterized this practice as an "overjudicialization" of the process which was "burdensome and expensive" and was unnecessary since "the same result could have been accomplished by less onerous methods." 1 JCAE Report, *supra* note 9, at 3, 34; *see id.* at 31-37, 56-57, 72-75; 2 *id.* at 461-65, 480-81, 483, 486-88, 514-16. As a consequence, the Joint Committee Staff made the following recommendation:

> The [licensing] board should be authorized to impose conditions in any decision on whether a construction permit or a license should issue. In so doing, it should specify whether a further hearing should be held to determine whether the conditions had been satisfied, or whether reports of AEC hazards analysis staff or staff inspectors to be placed in the public record might suffice.

1 JCAE Report, *supra* note 9, at 72. The commentary to this proposal made clear that this recommendation was

---

[9] *See generally* Staff of Joint Comm. on Atomic Energy, 87th Cong., 1st Sess., *Improving the AEC Regulatory Process* (Joint Comm. Print 1961) [hereinafter cited as JCAE Report].

viewed merely as a clarification of the NRC's existing authority and could be accomplished "without any amendment of the act and would, in fact, conform fully to the legislative intent concerning mandatory hearings." 2 JCAE Report, *supra* note 9, at 561. Apparently for this reason, no legislative amendment on this issue was ultimately adopted.[10] Thus, the legislative history supports rather than detracts from the NRC's authority to exempt pre-operational testing from the licensing hearing.

b. The existence of such authority also is supported by the Commission's practice of the last decade and a half. In 1970, the Commission revised its regulations to eliminate its seriatim licensing hearing procedure. The new rule provided that a full-power license would be issued on the basis of the "same findings" as had previously been required for issuance of the provisional operating license, and that the need for successful completion of any subsequent tests or inspections would be "incorporated in the full-term operating license as conditions." 35 Fed. Reg. 5,317 (March 31, 1970) (amending 10 C.F.R. § 50.57).

This procedure was not challenged by Congress, despite intensive legislative focus on Commission licensing and

---

[10] The court of appeals discounted the legislative history cited in the text because it viewed it as having been written in conjunction with "a proposed procedure, not ultimately adopted," entailing a single public hearing prior to issuance of the construction permit with no subsequent hearing required before issuance of the operating license. (App. A at 21a-22a). The court of appeals simply misunderstood the legislative history. The proposal in the JCAE Report did not eliminate the need for a licensing hearing in all circumstances; it simply limited license hearings to those cases where the board "determines that a hearing would be in the public interest." 1 JCAE Report, *supra* note 9, at 73. Moreover, the wholly separate proposal to expressly authorize the board to impose conditions which were not to be the subject of further hearings could be exercised with respect to *either* "a construction permit *or* a license." *Id.* at 72 (emphasis added).

hearing procedures.[11] Although "[i]t may often be shaky business to attribute significance to the inaction of Congress," *Power Reactor Development Co. v. International Union of Electrical Workers*, 367 U.S. 396, 409 (1961), given the Joint Committee's unique role in the oversight of NRC operations and its criticism of the NRC's prior practice, "it is fair to read this history as a *de facto* acquiesence in and ratification of the Commission's licensing procedure by Congress." *Id.*

In sum, these is ample indication that Congress authorized the NRC to eliminate pre-operational tests from the licensing hearing. Accordingly, the NRC acted within its authority by treating emergency preparedness exercises like any other test and excluding them from the hearing. The contrary purpose attributed to Congress by the court of appeals is simply an artifact. There is no basis for its refusal to follow *Storer* in the circumstances of this case.

2. Stripped of its specious rationale, it becomes clear that the decision of the court of appeals represents a foray away from the "narrow confines of the law into the more spacious domain of policy." *Phelps Dodge Corp. v. NLRB*, 313 U.S. 177, 194 (1941). As such, the court's decision is in conflict with this Court's long held doctrine of judicial deference to an agency's interpretation of the statute it administers.

The court of appeals was of the view that deference is necessary only if there is affirmative legislative history directly supporting the particular agency action in issue.[12] (App. A at 29a). Although the legislative history

---

[11] *See, e.g., AEC Licensing Procedures and Related Legislation: Hearings Before the Subcomm. on Legislation of the Joint Comm. on Atomic Energy, 92d Cong., 1st Sess.* (1971) (Parts 1-4); *To Amend the Atomic Energy Act of 1954 Regarding the Licensing of Nuclear Facilities: Hearings on H.R. 13731 and H.R. 13732 Before the Joint Comm. on Atomic Energy, 92d Cong., 2d Sess.* (1972) (Parts 1-2).

[12] The court of appeals' standard—albeit incorrect—was very clear. It rejected the NRC's interpretation of the Atomic Energy

discussed *supra* demonstrates that Congress did affirmatively support the NRC's position, the court's refusal to defer to the agency even if the statute were "silent or ambiguous" was itself improper. *See Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc., supra*, 104 S. Ct. at 2782.

The court of appeals apparently has yet to heed this Court's admonition to it that, unless "Congress has *directly* addressed the *precise question* at issue," the reviewing court may "not simply impose its own construction on the statute" but instead must defer to any administrative interpretation which "represents a reasonable accommodation of conflicting policies that were committed to the agency's care by statute." *Id.* at 2782-83 (emphasis added), *quoting United States v. Shimer*, 367 U.S. 374, 383 (1961).

The NRC's interpretation surely constitutes a reasonable accommodation of the "conflicting policies" reflected in the Atomic Energy Act.[13] It is of course true, as the court of appeals emphasized, that Congress recognized the value of public participation in the licensing process. Congress, however, was equally cognizant of the need

---

Act because it found "no basis in the statute or legislative history for NRC's position that Congress granted it discretion to eliminate from the hearing material issues . . . ." (App. A at 22a). Moreover, precisely because emergency planning was a relatively new issue, not previously considered by Congress, the court of appeals was unwilling to accept any NRC past practice for resolving such matters. The court stated: "[E]ven if we were confident Congress had acquiesced in the Commission's practice of conducting posthearing preoperation testing, we would not conclude its acquiescence covered emergency exercises, an issue which has just arisen in the past year." (App. A at 29a).

[13] The "conflicting policies" underlying the Atomic Energy Act are evident from the introductory chapter of the Act. *See, e.g.*, 42 U.S.C. § 2013(d) (1982) (one purpose of the Act is to "encourage widespread participation in the development of atomic energy" while ensuring the "common defense and security" and the "health and safety of the public").

to streamline the hearing process.[14] Given these competing goals, and the public's opportunity to participate in the development of the plan and to contest the adequacy of the plan in the public hearing process, the higher threshold placed on the public's ability to reopen the hearing to challenge the adequacy of the actual exercises is plainly justified. (*See* App. A at 38a; Judge MacKinnon, dissenting). The court's determination that public participation must take absolute precedence over the need to avoid delay reflects the court's own policy judgment and allows no room for the exercise of the agency's discretion to reasonably accommodate the conflicting policies which the Atomic Energy Act committed to the NRC's care. The decision below should not be allowed to stand.

II. The Decision Below Will Have a Significant and Widespread Adverse Impact

If the reach of the court of appeals' decision is no broader than invalidating the emergency plan rule amendment, with the consequent requirement for additional hearings, its impact will nonetheless be staggering. The NRC has estimated that licensing proceedings generally take one year or more, six months at a minimum. *Hearings on Nuclear Power Plant Delays, supra* note 14, at 138; *see id.* at 116, 126; 46 Fed. Reg. 17,216-18 (March 18, 1981). Although this time presumably can be shortened through reliance on expedited procedures, the cost of even a short delay can be astronomical—conservatively estimated at $20 to $40 million per

---

[14] *See, e.g.*, 1 JCAE Report, *supra* note 9, at vii-viii, 32-39, 49-50, 56-57, 62; 2 *id.* at 465-66, 480-81, 514-16; S. Rep. 113, 97th Cong., 1st Sess. 11 (1981); *Nuclear Power Plant Licensing Delays and the Impact of the Sholly Versus NRC Decision: Hearings Before the Subcomm. on Nuclear Regulation of the Senate Comm. on Environment and Public Works, 97th Cong., 1st Sess.* 1-3 (1981) (statements of Senators Simpson and Symms) [hereinafter cited as *Hearings on Nuclear Power Plant Delays.*]

month for each affected plant. S. Rep. No. 113, 97th Cong., 1st Sess. at 11 (1981).[15]

Since the effective date of the rule invalidated by the court of appeals, the NRC has issued 13 full-power operating licenses (and one more is anticipated before year end).[16] If the court of appeals' decision is not reversed, all 14 plants conceivably are in danger of having their operating authority suspended during the pendency of reopened proceedings to consider the results of emergency plan exercises. Even a one-month's suspension of operating authority would result in increased costs of at least $280 million; if the suspension lasted for six months, the increased cost would be an extra $1.7 billion.

Expectations as to the number of additional low-power and full-power licenses that the NRC will issue in the next year vary. A trade press report indicates that by the end of this year the NRC is expected to issue 9 new low-power operating licenses.[17] In its last-issued report summarizing regulatory licensing, the NRC projected it would issue 19 new full-power operating licenses prior to November 1985.[18] Even if only 10 such licenses are

---

[15] The low end of the spectrum represents only costs to consumers arising from utilities' need for replacement power. The high end of the estimate includes the carrying costs to the utilities for the construction loans. *Id.* Because these cost estimates are averages based on 1981 data, they undoubtedly are low for many plants. Using more recent plant-specific data, the replacement power cost alone for some plants may be as high as $47 million per month. *See* U.S. Nuclear Regulatory Commission, *Final Environmental Statement Related to Operation of Seabrook Station, Units 1 and 2* at 6-4 (NUREG-0895, 1982) (avoided cost in 1987 dollars).

[16] These plants are: Callaway 1, Diablo Canyon 1, Grand Gulf 1, LaSalle 1 and 2, McGuire 2, St. Lucie 2, San Onofre 2 and 3, Summer 1, Susquehanna 1 and 2, and Washington Nuclear 2; Catawba 1 is expected to receive its license by year's end.

[17] Nucleonics Week, Sept. 6, 1984, at 3.

[18] 12 U.S. Nuclear Regulatory Commission, *Regulatory Licensing Status Report for December 1-December 31, 1983*, at § 1 (NUREG-0580, 1984).

issued, additional increased delay costs (including capital costs) of from $400 million to $2.4 billion would result. The NRC report shows an additional 26 operating license applications pending.[19] If one makes the conservative assumption that only 15 of those plants will in fact be completed, delays of from one to six months in licensing due to the court of appeals' decision would result in cost increases of from $600 million to $3.6 billion.

In sum, depending on one's assumptions, the financial penalty imposed by the court of appeals varies from at least several hundred million dollars to possibly more than $7 billion. Regardless of the assumptions used, the impact of this penalty is staggering.

The reasoning underlying the court of appeals' decision unfortunately portends even greater mischief. If, as the court below suggested, the licensing hearing must encompass all matters relevant to the issuance of the license, then the NRC's "discretion to separate matters which properly belong in the licensing phase from those which belong in the post-adjudicative operational phase" (App. E at 100a) will be eviscerated. The NRC's corollary discretion to base licensing board findings on the prediction that the plant will operate safely rather than on demonstrated performance (*see* App. E at 93a-94a) similarly will be threatened.

The court of appeals, of course, eschewed any intent to affect the Commission's authority to exempt other preoperational tests and inspections from the hearing process. But the court's reasoning why the emergency exercises should be encompassed by the hearing—that they are relevant to and are a basis for the NRC's ultimate decision to issue a license—applies equally to other preoperational tests. Similarly, its reasoning for not applying the APA exemption for "tests and inspections" to the exercises—(a) that the evaluation of the exercises

---

[19] *Id.*

is "just one, not the 'sole,' factor in the Commission's overall determination" (App. A at 27a), and (b) that the evaluation of the exercises is based on a subjective weighing of factors rather than on a measure of "objective" "preestablished criteria" (App. A at 29a)—applies to other pre-operational tests and inspections as well.[20] Indeed, testing and inspections involved in the proceedings of other agencies are likely to be subject to attack for the same reason.

Even if opponents of nuclear plant licenses do not ultimately succeed in subjecting other pre-operational

---

[20] The court's conclusion that emergency plan exercise evaluations are different from "traditional preoperational testing" (App. A at 30a) is without basis in the record. First, the court of appeals inexplicably ignored the NRC's express finding, made when it denied the UCS rulemaking petition, that the emergency plan exercise is "analogous" to pre-operational testing of the facility and that neither activity is "less crucial" than the other to the NRC's ultimate safety findings. (*See* App. E at 93a, 97a, 100a-01a). Second, the court of appeals also ignored the evidence lodged with it showing the judgmental nature of the inspections conducted by the NRC staff. *See Reg. Guide 1.68, supra* note 6 (included among the "Exhibits" jointly filed by the parties in the court of appeals). Among other items, the pre-operational inspections conducted by the NRC staff are to determine: (a) whether the utility's test programs are "adequately implemented"; (b) whether those programs "demonstrate that the plant, procedures, and personnel are ready for safe operation", (c) whether the fuel-loading and startup procedures are adequate and appropriate "to control the operation [of the plant]"; (d) "whether information is being appropriately documented and evaluated by the [utility] and whether the [utility's] technical conclusions are valid"; and (e) whether the tests "are being performed in a technically competent manner." *Id.* at Appendix B, p. 1.68-19. Not one of these inspections can be measured by "objective" or "preestablished" criteria. The court of appeals' logic in distinguishing between such inspections and the emergency plan exercise is unfathomable.

Moreover, it is difficult to distinguish between emergency plan exercises and tests as to the quality of tea or the condition of airplanes which were cited in *Door v. Donaldson*, 195 F.2d 764, 766 (D.C. Cir. 1952), as matters within the APA's exception for "tests and inspections."

tests to public hearings, the attempts themselves will greatly protract the licensing process. This will effectively obstruct the issuance of new licenses, and cost the public "billions of dollars for years to come." (App. A at 38a-39a n.6; Judge MacKinnon, dissenting).

CONCLUSION

In construing the statute to preclude the NRC from adopting regulations which exclude emergency preparedness exercises from the licensing hearing, the District of Columbia Circuit has once again "unjustifiably intruded into the administrative process." *Vermont Yankee*, *supra*, 435 U.S. at 556. As this Court observed in *Vermont Yankee*:

> Nuclear energy may some day be a cheap, safe source of power or it may not. But Congress has made a choice to at least try nuclear energy, establishing a reasonable review process in which courts are to play only a limited role. The fundamental policy questions appropriately resolved in Congress and in the state legislatures are *not* subject to reexamination in the federal courts under guise of judicial review of agency action. Time may prove wrong the decision to develop nuclear energy, but it is Congress or the States within their appropriate agencies which must eventually make that judgment. In the meantime courts should perform their appointed function.

435 U.S. at 557-58 (emphasis in original).

The decision below severely impacts the NRC's regulatory authority, to the significant detriment of the utility industry and its ratepaying customers and without discernible benefit to the public. Given the success which those seeking to thwart nuclear power plant operation have had in the District of Columbia Circuit, it is unlikely that other courts of appeals will have an opportunity to pass on the important question here presented. Thus, there is special need for this Court to review the

decision below. For all the foregoing reasons, the petition for a writ of certiorari should be granted.

Respectfully submitted,

JAY E. SILBERG
Counsel of Record
ROBERT E. ZAHLER
SHAW, PITTMAN, POTTS
& TROWBRIDGE
1800 M Street, N.W.
Washington, D.C. 20036
Tel.: (202) 822-1000
Attorneys for Petitioners

October 31, 1984

APPENDICES

APPENDIX A

UNITED STATES COURT OF APPEALS
DISTRICT OF COLUMBIA CIRCUIT

No. 82-2053

UNION OF CONCERNED SCIENTISTS,
Petitioner,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION
and the UNITED STATES OF AMERICA,
Respondents,

ATTORNEY GENERAL OF MASSACHUSETTS,
ARKANSAS POWER & LIGHT CO., *et al.*,
Intervenors.

Argued Jan. 6, 1984

Decided May 25, 1984

As Amended July 2, 1984

Petition for Review of an Order of the
Nuclear Regulatory Commission

William S. Jordan, III, Washington, D.C., with whom Diane Curran and Ellyn R. Weiss, Washington, D.C., were on the brief, for petitioner.

Dan M. Berkovitz, Atty., Nuclear Regulatory Com'n, Washington, D.C., with whom Herzel H.E. Plaine, Gen. Counsel, E. Leo Slaggie, Acting Sol., Mark E. Chopko,

Atty., Nuclear Regulatory Com'n, Anne S. Almy and Blake Watson, Attys., Dept. of Justice, Washington, D.C., were on the brief, for respondents. Michael B. Blume, Atty., Nuclear Regulatory Com'n, and Peter R. Steenland, Atty., Dept. of Justice, Washington, D.C., also entered appearances for respondents.

Robert E. Zahler, Washington, D.C., with whom Hannah E.M. Lieberman, Washington, D.C., was on the brief for intervenor, Arkansas Power & Light Co., et al.

Jo Ann Shotwell, Boston, Mass., was on the brief for intervenor, Atty. Gen. of Mass., Francis X. Bellotti and Stephen M. Leonard, Asst. Atty. Gen., Boston, Mass., also entered appearances for intervenor, Attorney General of Massachusetts.

Before WALD and GINSBURG, Circuit Judges, and MacKINNON, Senior Circuit Judge.

Opinion for the Court filed by Circuit Judge WALD.

Dissenting opinion filed by Senior Circuit Judge MacKINNON.

WALD, Circuit Judge:

The Union of Concerned Scientists (UCS) petitions for review of a rule promulgated by the Nuclear Regulatory Commission (NRC or Commission) providing that an atomic safety and licensing board (licensing board) need not consider the results of emergency preparedness exercises in a licensing hearing before authorizing a full power license to operate a nuclear power plant. The rule provides, in lieu thereof, that final NRC issuance of the license must be preceded by satisfactory completion of an emergency preparedness exercise, and a conclusion by the NRC, based on this exercise, that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. UCS contends that this rule denies its statutory right to a

hearing on a material issue in licensing proceedings, under Section 189(a)(1) of the Atomic Energy Act (AEA or Act), 42 U.S.C. § 2239(a)(1) (1976). Additionally, UCS also contends that the Commission acted arbitrarily and capriciously in promulgating the rule, in violation of the Administrative Procedure Act (APA), 5 U.S.C. § 706(2)(A) (1982).

We find that because the rule denies a right to a hearing on a material factor relied upon by the Commission in making its licensing decisions, the rule was issued in excess of the Commission's authority under section 189(a), and must be vacated.

I. BACKGROUND

A. *Statutory and Regulatory Background*

In authorizing the NRC to issue licenses for nuclear power plant operation, the AEA delegates to the Commission broad discretion to decide what information it requires in making the licensing decision.[1] The Act provides that "the applicant shall state such technical specifications . . . as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the [applicant's activity] . . . will provide adequate protection to the health and safety of the public." 42 U.S.C. § 2232 (1976).

The Act itself establishes a two step licensing procedure. An applicant for a nuclear power plant operating license must first obtain a construction permit. Section 189(a) of the Act mandates a public hearing before a construction permit can be issued.[2] After a permit is

---

[1] Originally, under the AEA the Atomic Energy Commission (AEC) issued licenses. In 1974, the AEC was abolished, and its licensing functions transferred to the NRC. *See* Pub.L. 93-438, 88 Stat. 1233 (1974) (codified at 42 U.S.C. § 5814 (1976)).

[2] Section 189(a) of the Act as amended in 1957, Pub.L. No. 85-256, § 7, 71 Stat. 579 (1957), in 1962, Pub.L. No. 87-615, § 2, 76

issued, the prospective operator must apply for a license. The Act requires a hearing before the license is issued only if requested by an interested party.

If a hearing is requested, the Commission, under its regulations, designates a licensing board to conduct the proceeding. The licensing board, however, determines only whether the issuance of a license is authorized; the Commission actually issues the license at a later date. 10 C.F.R. §§ 2.760, 2.760a (1983). To authorize a license, the board must find that "there is reasonable assurance that the activities to be authorized by the operating license can be conducted without endangering the health and safety of the public . . . ." 10 C.F.R. § 2.104 (1983). The scope of the board's hearing is determined by the specific issues material to that determination that are raised by the requesting party.

If the licensing board authorizes a license, prior to its issuance the NRC staff conducts preoperational testing to

---

Stat. 409 (1962), and in 1983, Pub.L. No. 97-415, § 12(a), 96 Stat. 2073, reads

> In any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding. *The Commission shall hold a hearing after thirty days' notice and publication once in the Federal Register, on each application . . . for a construction permits for a facility.* . . . In cases where such a construction permit has been issued folowing the holding of such a hearing, the Commission may, in the absence of a request therefor by any person whose interest may be affected, issue an operating license or an amendment to a construction permit or an amendment to an operating license without a hearing, but upon thirty days' notice and publication once in the Federal Register of its intent to do so. . . .

42 U.S.C.A. § 2239(a) (West Supp. 1983) (emphasis supplied).

ensure that the operation of the completed plant comports with the expectations underlying the authorization. If in the course of this final review significant safety hazards are discovered, then additional hearings may be held at the Commission's discretion. *See generally Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), 14 NRC 950 (1981).

B. *History of Emergency Preparedness Exercises*

After the 1979 incident at Three Mile Island (TMI) the Commission, for the first time, required offsite emergency plans as a condition of a nuclear reactor operating license. Up to that time, state and local governments prepared such emergency plans on a voluntary basis, if at all. Following the TMI incident, the President's Commission on the Accident at Three Mile Island found that "the [emergency offsite] response was dominated by an atmosphere of almost total confusion." *Report of the President's Commission on the Accident at Three Mile Island—The Need for Change: The Legacy of TMI* 17 (1979). The President's Commission recommended that in the future before a utility was granted an operating license, offsite emergency response plans should be developed by state authorities, evaluated by the Federal Emergency Management Agency (FEMA), and the means for implementing them put in place.

The TMI episode also produced a shift in the NRC's attitude about offsite emergency planning. After the accident, the Commission announced that it now "view[ed] emergency planning as equivalent to . . . siting and design in public protection." 44 Fed.Reg. 75169 (1979) (proposed rule on emergency response plans). In 1980, after rulemaking proceedings, the Commission published its first final rule addressing offsite emergency preparedness. This rule provides:

> No operating license for a nuclear power reactor will be issued unless a finding is made by NRC that

> the state of onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

10 C.F.R. § 50.47(a)(1) (1983). Pursuant to the rule, FEMA is to make findings and determinations on whether offsite "emergency plans are adequate and whether there is reasonable assurance that they can be implemented." 10 C.F.R. 50.47(a)(2) (1983). The Commission in turn will base its findings on the state of emergency preparedness on FEMA's findings, which constitute a rebuttable presumption as to the adequacy and implementation capability of the emergency plans. *Id.*

The rule, however, expressly conditions licensing of plants on satisfaction of sixteen specific standards for emergency preparedness plans. One of those standards requires that

> [p]eriodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises are (will be) corrected.[3]

10 C.F.R. § 50.47(b)(14) (1983). For new plants,

> a full scale exercise which tests as much of the licensee, State and local [onsite and offsite] emergency plans as is reasonably achieveable without mandatory public participation shall be conducted . . . within one year *before* issuance of the first [full power] operating license.

10 C.F.R. Part 50, Appendix E, Section F1 (1983) (emphasis supplied). As originally promulgated, the rule said nothing specific either way about including the re-

---

[3] This provision applies to existing operating licenses as well as newly issued licenses. See 10 C.F.R. Part 50 Appendix E, § F 1.a.

sults of these compulsory exercises within the scope of the licensing authorization hearing.[4]

C. *The Challenged Rule on Emergency Exercises*

On July 13, 1982, the NRC issued an amendment to its rule on emergency preparedness, eliminating the emergency exercise as a prerequisite to *authorization* of a license. 10 C.F.R. § 50.47(a)(2) (1983) [hereinafter referred to as the Amendment]. The Amendment added to the language of the original rule the following provision:

> Emergency preparedness exercises . . . are part of the operational inspection process and are not required for any initial licensing decision.

10 C.F.R. § 50.47(a)(2) (1983). Despite this language, however, it left intact Appendix E's requirement for emergency preparedness plans that full scale exercises be held within one year before full power operation and the original rule's requirement that identified deficiencies be corrected. And, in response to comments by interested

---

[4] In some cases, licensing boards apparently authorized licenses without considering emergency preparedness exercises. *See, e.g.*, Pennsylvania Power and Light Co. (Susquehanna Steam Electric Station, Units 1 and 2), 15 NRC 771 (1982). In other cases, the licensing board conditioned its authorization upon exercises demonstrating the adequacy of the emergency preparedness plans. *See, e.g.*, Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), 15 NRC 1163, 1210 (1982); *cf.* The Cincinnati Gas & Electric Co. (Wm. H. Zimmer Nuclear Power Station, Unit 1), 15 NRC 1549, 1566 (in hearing prior to exercises, the inability of FEMA witnesses to address details and problems of plan implementation precluded authorization), *modified in relevant part*, 17 NRC 760 (1983) (in light of the 1982 amendment to the rule on emergency preparedness, no need for licensing board to wait for final FEMA determination on adequacy of plans to hold further hearings). Prior to the amendment of the emergency preparedness rule, we are aware of no case in which the Commission or one of its licensing boards squarely addressed the issue of whether, in the face of a challenge to the lack of emergency exercises, the board could authorize a license prior to such exercises.

parties, the Commission reiterated that "exercise[s] will [still] be held before full power [operation], and all significant deficiencies will be properly addressed." 47 Fed. Reg. 30233 (1982). The Commission's rationale for the Amendment was that it would allow exercises to be held at a time closer to full power operation of a plant, thereby making them more meaningful. *See* 47 Fed. Reg. 30233 (1982); 48 Fed. Reg. 16693 (1983). It in no way contended in its explanation for the rule, nor does it do so on this appeal, that the exercises are no longer material to its licensing decision. It argues instead that, under the Amendment, "these exercises are treated as part of preoperational testing of nuclear plants, which as a matter of longstanding regulatory practice has been conducted in the *post-adjudicatory phase of licensing.*" Brief for Respondent, Summary of Argument (emphasis supplied). Indeed, it concedes that its "evaluation of the exercise results . . . [*is*] *part of the administrative record for the licensing decision* and thereby subject to judicial review." *Id.* (emphasis supplied). In short, the odd choice of language in the Amendment notwithstanding it seems clear from the NRC's accompanying explanation and from its contentions on this appeal that it interprets its own Amendment as retaining evaluation of the offsite emergency exercises as a licensing prerequisite, but as taking the exercises out of the licensing hearing, and making them instead part of the staff's preoperational testing.[5]

---

[5] The Commission said the Amendment merely clarified that the findings on emergency planning required by the original rule for issuance of a license, were "predictive in nature and need not reflect the actual state of preparedness at the time the finding is made." 47 Fed. Reg. 30232 (1982). However, in assessing the Amendment's effect on public participation, the Commission stated "the rule changes will have the likely effect of limiting litigation of the success of exercises in licensing hearings," 47 Fed. Reg. 30233 (1982), thus acknowledging that the Amendment would to some extent modify the existing practices of exploring the exercise results in the licensing authorization hearing.

Prior to the promulgation of the Amendment, several interested parties expressed concern that the change would eliminate public participation in the review and assessment of exercises. The Commission responded that "such assessments are not necessary to make the kind of predictive finding on emergency planning called for by the regulations prior to license issuance." [6] *Id.* at 30233. It further noted that an interested party may seek to reopen a concluded hearing or petition for rescission of a license, should the "actual conduct of an exercise identify fundamental defects in the way that an emergency plan is conceived." *Id.* The Commission distinguished such fundamental defects justifying reopening of a hearing from those "which only reflect the actual state of emergency preparedness on a particular day in question." *Id.*

D. *Post-Amendment Developments*

Following promulgation of the Amendment, UCS petitioned the NRC to again amend the rule to provide specifically for a hearing on the results of the onsite and offsite exercises. The Commission denied UCS's petition, relying on the need for "the full-scale exercise [to] be held as close in time as possible to commercial operation of the facility." Denial of Petition for Rulemaking, 48 Fed. Reg. 16693 (1983). The Commission stated that "it is clearly impractical to hold the full-power proceeding record open solely for the purpose of litigating the results

---

[6] Commissioner Gilinsky dissented from the challenged Final Rule (the Amendment) noting:

> [t]he exercises never completely follow . . . [emergency preparedness] plan[s]. And this area happens to be one in which the nuclear plant's neighbors have special competence, greater in some respects than that of NRC or FEMA. Their comments can be particularly useful. These need not be presented in formal hearings, but we should have some means to receive and consider them.

47 Fed. Reg. 30235 (1982).

of the full-scale offsite exercises held at a time close to commercial operation." *Id.*

At the same time UCS filed its rulemaking petition, it petitioned this court to invalidate the Amendment, on the grounds that it violates Section 189(a) of the AEA, 42 U.S.C. § 2239(a) (1976), by denying affected members of the public a hearing on issues of fact material to the NRC's licensing decision, and that the Commission's decision to adopt the Amendment was arbitrary and capricious. We find that the Amendment is invalid because it denies statutorily prescribed hearing rights.[7]

II. Scope of the Licensing Proceeding

We address first the position of counsel for Intervenor, Arkansas Power & Light Company (Utility)—that evaluation of emergency preparedness exercises is part of the NRC's ongoing monitoring function of operating power plants rather than part of its initial licensing responsibilities.[8] The Utility argues that the monitoring function encompasses "licensing requirements" that are evaluated in a staff inspection prior to issuance (but after authorization) of a license. Brief for Intervenor-Utility at 32. That argument is flawed, however, because the Commission itself says that it relies on its assessment of emergency exercises in deciding whether to issue a license.[9] Clearly, then, those exercises cannot be viewed as falling outside of the licensing proceeding.

---

[7] Because we find that the Amendment contravenes Section 189(a) of the AEC, 42 U.S.C. § 2239(a) (1976), we need not decide if the NRC acted arbitrarily and capriciously in adopting it.

[8] The NRC does not appear to have taken this position either in its brief or at oral argument. Although the NRC concedes that the assessment of exercises is part of its licensing decision, it emphasizes the ongoing nature of the exercise requirement as part of its argument for discretion to exclude exercise evaluations from licensing hearings.

[9] *See supra* text at note 4 (NRC regulations require exercises before license is issued); Brief for Respondent at 39 n.20 (evalua-

Our view tracks the language of section 189(a). That section does not differentiate between the "authorization" and the "issuance" of a license for purposes of guaranteeing a hearing on request. Since the NRC, by its own regulations, has made correction of deficiencies identified in emergency exercises a requirement of its ultimate licensing decision, it would seem to follow that results of these exercises must be subject to the section 189(a) hearing requirement.

We find support for a literal application of section 189(a)'s hearing requirement in two of our own court's recent cases. In *Lorion v. NRC*, 712 F.2d 1472, 1475 (D.C. Cir. 1983), *cert. granted*, —— U.S. ——, 104 S.Ct. 1676, 80 L.Ed.2d 152 (1984), we held that section 189(a) does not mandate a hearing when the NRC denies a request that it institute a license amendment proceeding.[10] *Lorion* rejected the rationale of *Natural Resources Defense Council, Inc. v. NRC*, 606 F.2d 1261 (D.C. Cir. 1979), which had held that NRC rejection or approval of such a request came under section 189(a) because it was a necessary first step to license amendment. *Lorion*, 712 F.2d at 1478; *see id.* at 1479 n. ** (noting full court approval of *Lorion*'s position as law of the circuit). In doing so, *Lorion* relied on section

---

tion of emergency exercises is part of the "administrative record as a whole, which by definition includes the material on which the Commission *relies* for its decision") (emphasis supplied).

[10] *Lorion* decided that this court did not have jurisdiction to directly review an NRC denial of a request to institute amendment proceedings. *Lorion* relied, however, on section 189(b)'s express provision limiting this court's "reviewing authority to final orders entered pursuant to the kind of 'proceedings' specified in 42 U.S.C. § 2239(a), [section 189(a)]." *Lorion*, 712 F.2d at 1476. Thus, crucial to the *Lorion* holding, was the interpretation that section 189(a) proceedings do not include requests to initiate licensing amendments. *See id.* at 1478 (" 'proceeding' [in section 189(a)] cannot mean one thing for procedural purposes and another for jurisdictional purposes").

189's specification of the NRC actions—grants, suspensions, revocations, or amendments of any license or construction permit—that require a hearing, citing language of the Seventh Circuit that "[a]t least on a literal reading of section [189] . . . den[ial of a] request . . . to initiate a revocation proceeding was not an order final or otherwise, in a section [189(a)] proceeding". *Id.* at 1476 (quoting *Rockford League of Women Voters v. NRC*, 679 F.2d 1218, 1220 (7th Cir. 1982)).

This court again adopted a literalist approach toward section 189(a) in upholding the NRC's narrowly defined scope of a licensing amendment proceeding in *Bellotti v. NRC*, 725 F.2d 1380 (D.C. Cir. 1983). In *Bellotti*, the NRC had found serious deficiencies in management of a nuclear plant in Massachusetts that posed threats to the safety of residents in the area surrounding the plant. The Commission ordered a license amendment which required the licensee to submit, within 30 days, a safety-related plan of action for NRC approval. The Attorney General of Massachusetts sought to intervene and requested a 189(a) hearing on, inter alia, the adequacy of the plan. This court held that, despite the State of Massachusett's obvious interest in the safe operation of the licensee's plant, it had no cognizable adverse interest in the license amendment proceeding which involved only the issue of the Commission's order to the utility to develop a safety plan. "[T]he development of the plan of action [took] place outside the proceeding" and was not part of the NRC's decision to amend the license. *Bellotti*, 725 F.2d at 1382. We sustained NRC's reading of section 189(a) to grant a hearing only as to the issues material to the Commission's licensing decision.

In arguing that the Amendment contravenes section 189(a), USC does not object, as did the petitioner in *Bellotti*, to the Commission's restriction of the issues material to its licensing decision. The Commission, in

this case, has defined as such an issue whether the preparedness plans provide adequate assurances of safety in case of a radiological emergency. It concedes that in making its ultimate finding on this issue it relies on emergency exercise evaluations. Thus, unlike in *Bellotti*, here the Commission has removed from the licensing hearing *consideration of evidence that it considers relevant* to a material issue in the section 189(a) proceeding *as it has defined that issue.* Not only is this different from the NRC position we condoned in *Bellotti*, in fact, it is in tension with *Bellotti's* conclusion, in the context of a license amendment, that "public participation is automatic with respect to all [section 189(a)] Commission actions that are potentially harmful to the public health and welfare." *Bellotti*, 725 F.2d at 1383.

When NRC advocates successfully for a literal construction of 189(a)'s hearing requirement, it must take the bitter with the sweet: If section 189(a)'s precise language controls when intervenors attempt to obtain a hearing on a proposed amendment or to expand a proceeding to cover alternatives to the NRC's proposed amendment, it also controls when the NRC or an intervenor tries to limit the hearing requirement to *less* than the issues the NRC has itself defined as part of the "licensing proceeding" specified in 189(a). *See, e.g., Brooks v. AEC*, 476 F.2d 924 (D.C. Cir. 1973) (petitioners entitled to a hearing before AEC extended construction permit completion dates); *see also* 100 Cong. Rec. 10686 (1954) (section 189(a) was amended to "clearly specify the types of Commission activities in which a hearing is to be required"). Just as we ruled in *Lorion* that until granted, a request for agency action specified in section 189(a) "is not a 'proceeding' where the requestor has any right to present evidence." 712 F.2d at 1478, so must we now rule the converse, *i.e.*, that once a hearing on a licensing proceeding is begun, it must encompass all material factors bearing on the

licensing decision raised by the requester. *See Porter County Chapter of the Izaak Walton League v. NRC*, 606 F.2d 1363, 1368 (D.C. Cir. 1979) ("such proceedings as are begun shall be formal, public hearings").

The Commission and the Utility argue, alternatively, that the Amendment still allows enough opportunity for public participation in the assessment of the exercise results to satisfy section 189(a)'s hearing requirement. As stated above, the Commission invites petitioners to reopen the hearing if the exercise identifies fundamental defects in the emergency preparedness plans. The Utility points in particular to the Commission's willingness under the amended rule to reopen closed proceedings or institute new proceedings upon a request by an interested party alleging inadequate emergency preparedness. *See* Brief for Intervenor-Utility at 45 & n. 23, *see also* Brief for Respondent at 40 & n. 21 (pointing to willingness to reopen proceedings in cases where other safety deficiencies discovered).

We do not think the Commission's overture is broad enough to comply with section 189(a)'s requirement. We held in *Lorion* that a request to initiate license amendment proceedings under 10 C.F.R. § 2.206 (1983) is not a section 189(a) proceeding. *See* 712 F.2d at 1478-79. Our rationale was that the Commission's recognized discretion to "make whatever unilateral inquiries [it] deems necessary" in deciding whether to grant a request for initiation of a proceeding could not be squared with the requirement for a fullfledged hearing in section 189(a) proceedings.[11] *Id.* at 1475. We noted that "unless and

---

[11] The Commission has nowhere *obligated itself* to hold any evidentiary hearing or to reopen proceedings if an exercise "calls into question whether the requirements of C.F.R. 50.47 can or will be met." 47 Fed. Reg. 30233 (1982). Its comments upon adopting the Amendment state only that in such a case "a party . . . *may seek* to reopen a concluded hearing or file a petition for

until [the request is] granted it is not a 'proceeding' where the requester has any right to present evidence." *Id.* at 1476. The same regulation, 10 C.F.R. § 2.206, that governs a request to initiate an amendment proceeding also governs the Commission's discretion in denying a request to reopen a closed proceeding. In short, we believe the core question in this case is whether the NRC, consistent with section 189(a), may eliminate a material public safety-related factor in its decision from the licensing hearing in the interest of making the process more efficient. We turn now to that question.

III. Discretion to Limit the Scope of Section 189(a) Hearings

When a statute requires a "hearing" in an adjudicatory matter, such as licensing, the agency must generally provide an opportunity for submission and challenge of evidence as to any and all issues of material fact.[12] *See*

---

action pursuant to 10 C.F.R. 2.206." *Id.* (emphasis supplied). In denying UCS's subsequent rulemaking petition, the NRC said:

> [i]f . . . some key aspect of the plan turns out to be inadequate or unworkable, or the judgments reflected in the planning process are untenable, or major revisions will be necessary, the hearing *could be reconvened upon a showing that the Commission's standards for reopening have been met.* . . . Where appropriate, any person *may request* that the Commission institute a proceeding to take immediate action under 10 C.F.R. 2.206. Such action *could include, in extraordinary circumstances,* suspension of the license pending correction of the deficiency.

48 Fed. Reg. 16693 (1983) (emphasis supplied); *see also id.* ("if exercises showed that the plan . . . [was] seriously flawed . . . reopening of the hearing record *might* be appropriate") (emphasis supplied). Furthermore, these statements must be read in light of the Commission's practice generally not to reopen a hearing absent "new information [that] would clearly mandate a change in result." *Georgia Power Co.* (Alvin W. Vogtle Nuclear Plant, Units 1 and 2), 14 NRC 265, 271 (1981).

[12] Although section 189(a)'s hearing provision lacks the magic words "on the record," there is much to suggest that the Adminis-

General Motors Corp. v. Federal Energy Regulatory Commission, 656 F.2d 791, 795 & n. 7 (D.C. Cir. 1981); *Public Service Co. v. Federal Energy Regulatory Com-*

---

trative Procedure Act's (APA) "on the record" procedures, 5 U.S.C. §§ 554, 556, 557 (1982), apply. *See Porter County*, 606 F.2d at 1368 n.12 (dicta stating that "on the record" procedures apply); *see also City of West Chicago v. NRC*, 701 F.2d 632, 642 (7th Cir. 1983) (dicta stating that the legislative history of section 189(a) indicates that formal proceedings are required for issuing a nuclear power plant license, but not for issuing a material handling license); *but cf.* 2 K. Davis, Administrative Law Treatise, 450 (2d ed. 1979) (criticizing reading of APA used by *Porter County*). First, licensing is adjudication, and when a statute calls for a hearing in an adjudication the hearing is presumptively governed by "on the record" procedures. *See Seacoast Anti-Pollution League v. Costle*, 572 F.2d 872, 876-77 (1st Cir.), *cert. denied*, 439 U.S. 824, 99 S.Ct. 94, 58 L.Ed.2d 117 (1978). Second, in 1961, the AEC specifically requested Congress to relieve it of its burden of "on the record" adjudications under 189(a). *See generally* Staff of the Joint Committee on Atomic Energy, 87th Cong., 1st Sess., *Improving the AEC Regulatory Process, Vol. 1* (Comm. Print 1961), [hereinafter cited as JCAE Report]. In response, Congress enacted the present provision permitting a license to be granted without a hearing when no hearing was requested. But it did not alter in any way the existing interpretation or definition of a 189(a) hearing, thereby apparently reaffirming its intent that "on the record" procedures apply in licensing. *See* S. Rep. No. 1677, 87th Cong., 2d Sess. 6-7 (1962) U.S. Code Cong. & Admin. News 1962, p. 2207; *see also Independent Bankers Association v. Board of Governors of the Fed. Reserve Sys.*, 516 F.2d 1206, 1218-19 (D.C. Cir. 1975) (interpreting similar congressional action as indicating "on the record" procedures apply in adjudications under the Bank Holding Company Act). Third, more recently in amending section 189(a) to allow hearings after (rather than prior to) a license amendment where the NRC determines that the amendment involves no significant hazards, Congress again assumed that the amendment hearings were "on the record." *See, e.g.*, H.R. Rep. No. 22, Part 2, 97th Cong., 1st Sess. 9 (1982). Finally, over the past twenty years the NRC has consistently taken the position that section 189(a) calls for "on the record" hearings in adjudications. *See* JCAE Report, *supra*, at 48-49 (1961) (Commission views statute, as amended in 1957, as requiring formal procedures); *Philadelphia Newspapers, Inc. v. NRC*, 727 F.2d 1195 at 1199-1202 (D.C. Cir., 1984) ("Commission apparent[ly] interpret[s] . . .

mission, 600 F.2d 944, 955 (D.C. Cir.), *cert. denied*, 449 U.S. 990, 100 S.Ct. 520, 62 L.Ed.2d 419 (1979); *Independent Bankers Association of Georgia v. Board of Governors of the Federal Reserve System*, 516 F.2d 1206, 1220 (D.C. Cir. 1975); *see also Siegel v. NRC*, 400 F.2d 778, 784 (D.C. Cir. 1968) ("the hearing granted by the [AEC] presumably must embrace all relevant matters"). It is undisputed that the Commission must make an ultimate finding in a licensing proceeding that "there is reasonable assurance that adequate protective measures can and will be taken in the event of radiological emergency." 10 C.F.R. 50.57(a)(1). Both the NRC and FEMA, which has been assigned the task of making a preliminary finding on the adequacy of offsite emergency preparation, require by rule an assessment of emergency exercises, which they then rely on in determining the adequacy of emergency plans to ensure the surrounding community's safety in the case of a radiological accident.[13] *See* 10 C.F.R. Ap-

---

Section 189(a) as requiring formal hearings in licensing proceedings").

Nonetheless, we refrain from holding outright that section 189(a) requires "on the record" hearings in licensing adjudications. The parties did not brief this issue, and the Commission's regulations governing licensing proceedings provide for hearing procedures that comport with or even surpass those required by the APA for "on the record" adjudication. *Compare* 10 C.F.R. §§ 2.700-2.780 (1982) (NRC regulations on hearings) *with* 5 U.S.C. §§ 554, 556, 557 (1982) (APA "on the record" adjudicatory procedures). The issue presented to us by the parties is whether the NRC can, in its discretion, bypass section 189(a)'s hearing requirement altogether on issues material to its licensing decision.

[13] FEMA requires the exercises as a prerequisite for its approval of state and local plans for purposes of federal assistance but not for its findings on adequacy, which it submits to the NRC. Nonetheless, FEMA's rule includes exercises as a criteria for its "findings and determinations as to the adequacy of the State and local plans and the capabilities of the State and local governments to effectively implement these [emergency preparedness] plans."

pendix E § F 1.a. (1983); 44 C.F.R. § 350.9 (1983). Although in any particular licensing proceeding, the exercise may not raise any material issues about the adequacy of the preparedness plans, the Commission cannot and does not argue that assessment of these exercises is immaterial to its licensing decision.[14]

The Commission argues instead that, although assessment of emergency exercises is generally material to the licensing decision, section 189(a) still leaves it discretion to evaluate the exercises outside the hearing procedure preparatory to making its ultimate finding on the adequacy of offsite preparation. Under its amended rule, the "exercises are treated as part of the preoperational testing of nuclear plants, which as a matter of long-standing regulatory practice has been conducted in the

---

FEMA Review and Approval of State and Local Radiological Emergency Plans and Preparedness, 48 Fed. Reg. 44332 (1983) (Final Rule). In commenting on USC's rulemaking petition that hearings on the emergency exercise be held, FEMA stated:

> FEMA wishes to reaffirm the importance and value of the joint exercise for FEMA's findings concerning the adequacy of offsite plans and preparedness. A full-scale joint exercise . . . is necessary if FEMA is to certify in a finding that State and local governments are capable of protecting public health and safety in the event of an accident at a commercial nuclear power plant.

Letter from Dave McLaughlin, Deputy Associate Director, State and Local Programs Support, to NRC (docketed Jan. 27, 1983).

[14] Contrary to the dissent's suggestion otherwise, Diss. Op. at n.2, we do recognize that the Amendment makes the NRC's requisite findings on emergency preparedness more predictive in nature. But even under this amended standard, which is not challenged in this case, the NRC requires a successful evaluation of onsite and offsite emergency exercises before it issues a full power operating license. *See supra* text at nn.4-6. Our holding today in no way reflects on the propriety or impropriety of that modified substantive standard, it only requires that emergency exercise evaluations be subject to public hearings because they are material to the NRC's licensing decision under the new standard. *See infra* text at n.20.

post-adjudicative phase of licensing." Brief for Respondents, Summary of Argument. It further claims that reading the AEA to require hearings on all issues relevant to licensing would place an unrealistic and unreasonable burden on the NRC's ability to achieve its "statutory objectives in a timely and efficient manner." *Id.*

A. *The Balance Between Efficiency of Proceedings and the Public's Right to a Hearing*

We have already acknowledged that the NRC has great discretion to decide what matters are relevant to its licensing decision, *see Siegel*, 400 F.2d at 783. We conclude, however, that its discretion to limit public participation in resolving the matters it deems relevant is more circumscribed as a result of section 189(a)'s hearing requirements. Administrators may not lightly sidestep procedures that involve the public in deciding important questions of public policy. *Environmental Defense Fund, Inc. v. Ruckleshaus*, 439 F.2d 584, 594 (D.C. Cir. 1971). "[T]he Commisison is entitled to great freedom in its efforts to structure its proceedings so as to maintain their integrity while assuring meaningful public participation, *but one of its goals must be to assure that there is meaningful public participation.*" *Bellotti*, 725 F.2d at 1389 (Wright, J., dissenting) (emphasis in original).

In this case, we believe the Commission has upended the balance struck by Congress between efficiency and public participation. In 1961, the AEC requested that Congress relieve it of the burdens and delays caused by licensing hearings. Congress relieved the Commission of these burdens only to the extent of allowing licensing without a hearing in the absence of a request. Congress was influenced in that decision by the Staff Report of the Joint Committee on Atomic Energy,[15] which stated:

---

[15] The Joint Committee was established in 1954 to monitor for Congress developments under the Atomic Energy Act of 1954. *See* 42 U.S.C. §§ 2251-2257 (1976). It was abolished in 1977. *See* 42 U.S.C. § 2258 (Supp. V. 1981).

> [t]he gravity of the safety questions decided whenever a license is issued makes it important to provide an opportunity for interested members of the public to attend and to furnish an inducement to both applicant and staff to formulate their respective views in terms so susceptible to lay understanding as the subject permits. Moreover, in doing "the homework" for such a hearing, the applicant or the staff may view the problems they have been considering in a new perspective and may become aware of a new way to rethink or reexamine some facet of a problem.

JCAE Report, *supra* note 12, at 49.

The NRC again went to Congress in 1982 complaining about the delay that public hearings on licensing normally cause, exacerbated at that time by the logistical deployment of the NRC staff to handle the Three Mile Island situation. It asked for authority to grant interim licenses without a hearing. At about the same time, in response to this court's decision in *Sholly v. NRC*, 651 F.2d 792 (D.C. Cir. 1981), *vacated and remanded*, —— U.S. ——, 103 S.Ct. 1170, 75 L.Ed.2d 423 (1983), it asked for authority to issue license amendments without hearings if they involved "no significant hazards consideration." S. Rep. No. 113, 97th Cong., 1st Sess. 14 (1982), U.S. Code Cong. & Admin. News 1982, pp. 3592, 3598. Although Congress granted the Commission partial relief on both requests, *see* 42 U.S.C.A. §§ 2239(a), 2242 (West Supp. 1983), it stressed the importance of the section 189(a) hearing requirement by requiring the agency to hold hearings subsequent to the issuance of the temporary license or the license amendment.[16] The House Report noted:

---

[16] Congress allowed the NRC to grant temporary licenses without a prior hearing as "an extraordinary and temporary cure for an extraordinary and temporary problem." H.R. Rep. No. 22, Part 2, 97th Cong., 1st Sess. 9 (1982); *see also* Sen. Rep. No. 113, 97

> the hearing process serves a vital function as a forum *for raising relevant issues* regarding the design, construction and operation of a reactor, and for providing a means by which the applicant *and the Commission staff* can be held accountable for their actions regarding a particular facility. . . . [T]he hearing process is essential to obtaining public confidence in the licensing process which is needed if the nuclear option is to be preserved.

H.R. Rep. No. 22, Part 2, 97th Cong., 1st Sess. 11 (1982) (emphasis supplied).

The Commission points to one paragraph in the 1961 JCAE Report as showing that Congress contemplated reliance on staff, rather than a public hearing, to resolve issues of implementation left open after the licensing hearing.[17] *See* Brief for Respondent at 30. That para-

---

Cong., 1st Sess. 13 (1982). This authority expired on December 31, 1983. *See* 42 U.S.C.A. § 2242(e) (West Supp. 1983).

The subsequent hearing for a temporary license, although not governed by the full procedural requirements applied to 189(a) hearings by NRC regulations, was to afford "*full disclosure of material facts on all substantial issues* raised in connection with the issuance of any temporary operating license." H.R. Rep. No. 22, Part 2, 97th Cong., 1st Sess. II (1982) (emphasis supplied). Furthermore, a full section 189(a) hearing for a final operating license had to "be concluded as promptly as practicable." 42 U.S.C.A. § 2242 (West Supp. 1983).

[17] That paragraph states:

> [A Licensing] Board should be authorized to impose conditions in any decision on whether a construction permit or a license should issue. In so doing, it should specify whether a further hearing should be held to determine whether the conditions have been satisfied, or whether reports of AEC hazards analysis staff or staff inspectors to be placed in the public record might suffice. In many cases, the public interest in safety could be adequately served by the latter procedure. If conditions proposed by the Board are not satisfactory to the applicant or to the staff, the Board should provide for confer-

graph, however, was written in the context of a proposed procedure, not ultimately adopted, entailing a single public hearing prior to issuance of the construction permit with no subsequent hearing required before issuance of the operating license.[18] *See* JCAE Report, *supra* note 12, at 72-73. Since that proposal envisioned no further hearings after the construction permit was issued to decide issues material to the licensing decision, absent a specific order of a future hearing by the licensing board, those decisions perforce had to be left to staff inspections and recommendations. Congress, of course, did not adopt the single hearing proposal; it opted instead for further public hearings before licensing *upon request of any interested party. See* Pub.L. No. 87-615, § 2, 76 Stat. 409 (1962). In so doing, we believe Congress vested in the public, as well as the NRC staff, a role in assuring safe operation of nuclear power plants. In sum, we find no basis in the statute or legislative history for NRC's position that Congress granted it discretion to eliminate from the hearing material issues in its licensing decision.

Our decision that the hearing requirement of section 189(a) includes factual issues raised about the preparedness exercises is not overly restrictive. In its supporting statement for the Amendment, the Commission said that "[t]he conduct of full-scale exercises early enough in the licensing process to permit the outcome of the exercises to be fully litigated at the [licensing] hearing is pre-

---

ences in order to consider possible alternatives compatible with its objectives which would be more satisfactory.

JCAE Report, *supra* note 12, at 72-73.

[18] The proposed licensing procedure provided:

The Board should decide that an operating license should issue after publishing notice of intent to do so, but without a hearing unless it determines that a hearing would be in the public interest.

JCAE Report, *supra* note 12, at 73.

mature." 47 Fed. Reg. 30233 (1982). If that is so, we see nothing to prevent the Commission from holding a special supplementary hearing solely on issues raised by the emergency exercises closer to the date of full power operation.[19] And certainly the Commission can limit that hearing to issues—not already litigated—that it considers material to its decision.

So viewed, we find that section 189(a)'s hearing requirement does not unduly limit the Commission's wide discretion to structure its licensing hearings in the interests of speed and efficiency. For example, the Commission argues throughout its brief that the exercise is only relevant to its licensing decision to the extent it indicates that emergency preparedness plans are fundamentally flawed, and is not relevant as to minor or ad hoc problems occurring on the exercise day. Today, we in no way restrict the Commission's authority to adopt this as a substantive licensing standard.[20] *See Siegel*, 400 F.2d at 783 ("broad responsibility . . . reposed in [the NRC]" justified its decision that the security of a power plant from enemy takeover is not relevant to licensing); *see also North Anna Environmental Coalition v. NRC*, 533 F.2d 655, 689-90 (D.C. Cir. 1976) (upholding decision in

---

[19] The Commission dismissed this option as "impractical" when it denied UCS's rulemaking petition. 48 Fed. Reg. 16693 (1983). In doing so, however, it seems to have conceded that supplementary hearings would alleviate the problem of premature emergency exercises, but nonetheless rejected such hearings because "delay would occur without commensurate safety benefit in the ordinary case." *Id.* Our conclusion, that Congress did not authorize the Commission to eliminate hearings on issues material to its licensing decision under an efficiency rationale, precludes its rejection of a supplementary hearing, in favor of no hearing at all, on that basis. *See supra* text at notes 12-18.

[20] Of course, if such a standard were challenged in court, the NRC might still have to defend itself against allegations that it had acted arbitrarily and capriciously. *See* 5 U.S.C. § 706 (1982); 42 U.S.C. § 2239(b) (1976) (invoking section 706).

a particular licensing proceeding that siting of plant on geological fault was not unduly unsafe); *Westinghouse Electric Corp. v. United States*, 598 F.2d 759, 771-73 (3d Cir. 1979) (NRC had broad discretion to impose moratorium on decisionmaking regarding recycling of nuclear fuel in light of uncertainty about efficacy of recycling). Under that standard, the NRC could summarily dismiss any claim that did not raise genuine issues of material fact about the fundamental nature of the emergency preparedness plans. *See* 10 C.F.R. § 2.749 (1983). To avoid summary disposition, a party would have to identifiy and support specific facts upon which a reasonable inference could be drawn that the plan provided inadequate assurances of safety. *See id.; BPI v. AEC*, 502 F.2d 424, 428 (D.C. Cir. 1974) (under section 189(a) "Commission [may] require that prospective intervenor first specify basis for a hearing"); *see also National Souvenir Center, Inc. v. Historic Figures, Inc.*, 728 F.2d 503 at 512-513 (D.C. Cir. 1984) (stating test for genuine issue of material fact). If a party's claim survived summary disposition, the Commission might then use expedited procedures to shorten the period between the exercises and the date of license.[21] However the Commission wishes to

---

[21] The Commission's regulations allow the licensing board to expedite proceedings by focusing the proceedings on the key contested issues, *see e.g.*, 10 C.F.R. § 2.751 (prehearing conference), and by strictly limiting the presentation of evidence and cross examination to relevant and non-repetitive material. *See* 10 C.F.R. § 2.757 (authority of presiding officer to regulate procedure in a hearing). Although we do not express any opinion about the extent to which the NRC could or should expedite procedures, we note past criticisms that it has over-formalized its procedures. *See* Tourtellotte, *Nuclear Licensing Litigation: Come On In, the Quagmire is Fine*, 33 Admin. L. Rev. 367 (1981); *cf.* Cotter, *Nuclear Licensing: Innovation Through Evolution in Administrative Hearings*, 34 Admin. L. Rev. 497 (1982) (generally applauding recent efforts of NRC to expedite hearings but warning of possible due process violations).

The dissent states that holding hearings on emergency exercises evaluations could delay licensing proceedings "up to two years in

do it, the only central requirement is that there by an opportunity to dispute issues raised by the exercises under the relevant decisionmaking criteria.

B. *Assessment of Exercises as Preoperational Testing*

Finally, the NRC justifies removing exercise results from the licensing hearing because it believes they are more appropriately treated as part of the preoperational testing process, which has traditionally been exempted from the licensing hearing. Brief for Respondent at 26. The AEA does not explicitly except preoperational testing from section 189(a)'s hearing requirement, but the NRC argues that such an exception reflects the practical realities of the licensing duties which Congress imposed on it. The argument depends on two propositions: (1) that for certain NRC decisions public hearings serve little purpose and those decisions should be excepted from section 189(a) hearings, and (2) evaluations of emergency preparedness are such decisions.

Although the AEA includes no exceptions to section 189(a), there is something to be said for the first proposition: Obviously, Congress did not mean to require a hearing where a hearing serves no purpose. In determining the scope of such an exception we look to the APA,

---

cases where the Commission's decisions are appealed to courts." Diss. Op., text at n.6. This not only ignores the potential for time savings by use of expedited procedures, but it incorrectly assumes that a license cannot issue until the Commission and the courts affirm the licensing board decision. To the contrary, within 30 days of the board's decision, the Commission will determine whether to stay the issuance of the license. 10 C.F.R. § 2764(f)(2)(iii) (1983).

> An operating license decision will be stayed by the Commission . . . [only] if it determines that it is in the public interest to do so, based on a consideration of the gravity of the substantive issue, the likelihood that it has been resolved incorrectly below, the degree to which correct resolution of the issue would be prejudiced by operation pending review, and other relevant public interest factors.

10 C.F.R. § 2764(f)(2)(i) (1983).

where Congress exempted from the formal hearing procedures adjudicatory "decisions [that] rest solely on inspections, tests, or elections," 5 U.S.C. § 554(a)(3) (1982), "because these methods of determination do not lend themselves to the hearing process." S. Rep. No. 752, 79th Cong., 1st Sess. 16 (1945). The language of the APA exemption is circumscribed, and does not encompass all decisions which are based on evidence derived from tests or inspections. Were it not so circumscribed, an agency would have unfettered discretion to do away with hearings altogether and replace them with staff inspections as the sole method of developing evidence for its ultimate decision. For example, under such a broad reading, the NRC conceivably could remove safety review of nuclear reactor design from the license hearing by relying solely on tests and inspections to determine that the reactor operates safely. Obviously, the test exemption is not so broad.

In seeking to discern its limits, we look to the legislative history of the APA.[22] There, although Congress did not elucidate its reasoning at length, it cited the Attorney General's report that analyzed the exemption as designed for on the spot decisions made by a qualified inspector who himself "saw . . . tested . . . or examined" the evidence material to the decision.[23] There is no indication

---

[22] The major case on the scope of the test exemption, *Door v. Donaldson*, 195 F.2d 764 (D.C. Cir. 1952), illuminates only to the extent that it states, in dicta, that the exemption includes "technical facts like the quality of tea or the condition of an airplane as to which administrative hearings have long been thought unnecessary." *Id.* at 766.

[23] The Attorney General's report stated the following rationale for the test exemption:

> The most important element in [a] decision [that falls within the exemption] is the judgment of the man who saw[,] . . . tested . . . or . . . examined [the article to be approved]. Formal proceedings are not, of course, impossible. A trial examiner could be designated; the inspector could be summoned to testify, under oath, concerning his observations. . . . But resort to formal procedure in this type of administrative

it was meant to apply to decisions that are made by weighing evidence tendered by third parties. Where, as with preparedness exercises, the decision involves a central decisionmaker's consideration and weighing of many other persons' observations and first hand experiences, questions of credibility, conflicts, and sufficiency surface and the ordinary reasons for requiring a hearing come into the picture.

In light of the scope of the APA's test exemption, we do not believe that evaluations of emergency preparedness exercises fall within the category of determinations that might be excepted from a section 189(a) hearing because they do not lend themselves to the hearing process. In evaluating the exercises, the Commission does more than just review on the scene reports by NRC staff observers. Rather, the Commission is called upon to consider and weigh evidence presented by FEMA, the licensee, and state and local officials as well as its staff in assessing whether the exercises demonstrate that adequate emergency preparedness plans can and will be implemented. In addition, the evaluation of exercises is itself just one, not the "sole," factor in the Commission's overall determination, required under the rule, that, in case of a radiological emergency, there is reasonable assurance that adequate measures can and will be taken to protect the health and safety of the population around a nuclear power plant. Thus, we conclude that evaluation of emergency exercises is not a determination resting solely on a

---

> matter . . . is not desired or utilized . . . because it gives no added protection. The judgment would necessarily remain the determining element in the decision, and, in any event, some immediate decision concerning the fitness of an applicant, or of an airplane, or a locomotive, or a ship, is necessary to protect the public interest.

Attorney General's Committee on Administrative Procedure, Final Report to the President and to the Congress 37 (1941), *reprinted in* United States Dep't of Justice, Attorney General's Manual on the APA 45 (1947).

test or inspection so as to qualify for a generic exemption from section 189(a)'s hearing requirement.[24]

The NRC also argues that Congress has acquiesced in the Commission's longstanding practice of conducting preoperational testing after the licensing hearing, and it now has the discretion to add emergency exercise evaluations to the list of such tests. It refers us to *Power Reactor Development Co. v. International Union of Electrical Workers*, 367 U.S. 396, 81 S.Ct. 1529, 6 L.Ed.2d 924 (1961), which involved a challenge to an AEC finding of adequate assurance of safety in a construction permit proceeding. *Power Reactor* read Congress' failure specifically to require the AEC to make a definitive safety finding at the construction permit stage as acquiescence in the Commission's practice of deferring such a safety finding until the licensing stage. *Id.* at 408, 81 S.Ct. at 1535.

We find this acquiescence argument unconvincing for two reasons. First, it deals in the "shaky business [of] attribut[ing] significance to the inaction of Congress." *Id.* at 409, 81 S.Ct. 1535. Usually, such significance attaches to inaction only where there is evidence that Congress was aware of a problem. *Power Reactor*, for example, involved an issue that had "time and again been brought to the attention of the Joint Committee" which has a special obligation to apprise Congress of the "state of the atomic energy industry." *Id.* at 408, 81 S.Ct. at 1535. Also, the Court noted that the regulation did not infringe on the statutory right to a definitive finding on

---

[24] The dissent appears to acknowledge no bounds on the Commission's discretion to remove material determinations from the statutory hearing requirement and classify them as preoperational testing. It unquestioningly accepts the NRC's undocumented position that the emergency exercise should be treated as part of preoperational testing. Diss. Op. at 1454-1455. Under such a standardless rationale, there appears to be nothing to prevent an agency from circumventing a statutory hearing requirement altogether by basing all of its critical determinations on evidence derived from tests and inspections. *See supra* at 1449.

safety *at a subsequent hearing*. *Id.* at 411, 81 S.Ct. at 1536. This case is different in both respects.[25]

Second, even if we were confident Congress had acquiesced in the Commission's practice of conducting post-hearing preoperational testing, we would not conclude that its acquiescence covered evaluation of emergency exercises, an issue which has just arisen in the past year. Preoperational testing has traditionally involved testing of reactor systems to ensure that they meet established, objective "acceptance criteria." *See, e.g.*, 10 C.F.R., Part 50, App. J. (Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors). The licensee conducts the tests and reports the results to the Commission. *Id.* (Section V. Inspection and Reporting of Tests). Assessing these test results falls squarely within the NRC staff's technical expertise. Emergency preparedness exercises, on the other hand, are not evaluated in terms of preestablished criteria; they are evaluated to ensure that they do not reveal any fundamental inadequacies in the nature or implementation capacity of emergency preparedness plans. *See* 10 C.F.R., Part 50, App. E (exercise to test "as much of the licensee, state, and local emergency plans as is reasonably achievable without mandatory public participation"). Exercise evaluations focus on the coordination of police, fire, medical and other service personnel who operate under the auspices of

---

[25] The NRC also cites *Public Service Co. v. NRC*, 582 F.2d 77 (1st Cir.), *cert. denied*, 439 U.S. 1046, 99 S.Ct. 721, 58 L.Ed.2d 705 (1978), to support its acquiescence argument. In that case, the First Circuit deemed Congress to have acquiesced in a rule that allowed the NRC to assert jurisdiction over equipment associated with a nuclear reactor (power lines), although there was no evidence that the rule was ever brought to Congress's or the JCAE's attention. Like the rule in *Power Reactor*, however, that rule did not contravene any other clear statutory provision (such as the provision for a hearing on request). Obviously, there can be no general proposition that courts should assume Congressional acquiescence in all longstanding NRC practices; each case must be decided on its own facts.

several independent entities—the licensee, utility, county, state and federal governments, even community volunteer agencies. Evaluation of such exercises, insofar as it involves the adequacy of community preparedness plans, will be as much within outside participants' expertise, or that of other federal agencies like FEMA, as within the expertise of the NRC staff. *See, e.g., Metropolitan Edison Co.*, 14 NRC 1211, 1695 (TMI Unit 1 Restart) (team of federal observers from FEMA, EPA, DOE, NRC, FDA, Public Health Service, USDA and DOT reported exercise response deficiencies). We thus find exercise evaluations sufficiently different from traditional preoperational testing to render any inference of congressional acquiescence—even if it were justifiable as to traditional testing—entirely too speculative with respect to emergency preparedness exercises.

CONCLUSION

In order to facilitate licensing of nuclear power plants, and to ensure that emergency preparedness exercises are conducted near enough in time to full power operation to be meaningful, the NRC has ruled that the exercises need not be conducted before the licensing hearing; it still requires, however, that the exercises be conducted and demonstrate adequate assurance of safety before a license will issue. Thus, the NRC has removed from the hearing required by section 189(a) material issues relevant to its licensing decision. On the basis of the statutory language as well as a history of congressional reaction to prior attempts by the Commission to eliminate or significantly restrict the scope of section 189(a) hearings, we find that Congress did not grant the Commission discretion to remove so material an issue as the results of offsite emergency preparedness from required section 189(a) hearings. The adoption of such a rule was beyond NRC's statutory authority; accordingly we vacate the Amendment.

It is so ordered.

MacKINNON, Senior Circuit Judge (dissenting):

Section 189(a) of the Atomic Energy Act provides for hearings on the granting of licenses,[1] but the Act delegates to the Nuclear Regulatory Commission (NRC) the responsibility to determine the substantive requirements for licenses. Thus, the scope of Section 189(a) hearings are necessarily determined by the substantive requirements that the Commission's regulations provide are to be considered in connection with any particular license.

Pursuant to Congress' delegation of licensing authority to the NRC, the Commission has by regulation required the preparation of emergency response plans, onsite and offsite, for nuclear power reactors. As petitioner and respondent are agreed, these *plans* will unquestionably be subject to the Section 189(a) hearing requirement. In my view, the majority errs, however in going further, to require substantially broader hearings. Misapplying Section 189(a), the majority decision effectively *expands* the substantive scope of operating license hearings, by *forcing inclusion of review of the emergency exercises* that the NRC requires later on as part of the final testing process. The ultimate effect of this Court's decision is to intrude upon the Commission's exclusive authority to define the substantive requirements for an operating license.

Under the NRC's rules, prior to issuance of a full power operating license, emergency *plans* must be developed, subject on request to a public hearing, and emergency *exercises* must be conducted later in such a manner as to demonstrate the adequacy of both onsite and offsite emergency plans. The regulatory amendments here in question leave unchanged much of the Commission's basic approach to emergency preparedness. The

---

[1] "In any proceeding under this chapter, for the granting . . . of any license . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding." 42 U.S.C. § 2239(a)(1) (1976); 42 U.S.C.A. § 2239(a)(1) (West Supp. 1983).

instant rulemaking does, however, accomplish several changes. First, the rule significantly revises the substance of the basic finding that the NRC must make as to emergency preparedness. Under the new rule, the NRC's required finding is essentially *predictive* in nature:

> [N]o operating license for a nuclear power reactor will be issued unless a finding is made by NRC that there is *reasonable assurance that adequate protective measures can and will be taken* in the event of a radiological emergency.

10 C.F.R. § 50.47(a)(1) (1983); 47 Fed. Reg. 30232, 30235 (July 13, 1982) (emphasis added); *see* 47 Fed. Reg. at 30233 (NRC's discussion of final rule, describing "predictive finding").[2] Second, the Commission provides that low power licenses require only adequate *onsite* emergency plans; no offsite showing is required for fuel loading and low power operation. *See* 10 C.F.R. § 50.47(d);

---

[2] The language of the prior standard placed a greater emphasis on the *actual level of readiness* for emergencies:

> No operating license for a nuclear power reactor will be issued unless a finding is made by NRC that the *state of onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken* in the event of a radiological emergency.

10 C.F.R. § 50.47(a)(1) (superceded); 45 Fed. Reg. 55402, 55409 (Aug. 19, 1980) (emphasis added). This significant change in the relevant substantive standard might obviously have a substantial effect on the scope of Section 189(a) hearings. Yet the majority opinion fails adequately to recognize this change in the nature of the requisite emergency preparedness finding. Much of petitioner's brief is devoted to attacking the factual basis for the Commission's determinations that a predictive finding is sufficient to fulfill its regulatory responsibilities, and that that predictive finding can be made prior to conduct of exercises. The majority does not directly question the rule's change in the required substantive finding. In my view, however, the ultimate effect of the majority's decision is to undermine the Commission's decision to modify the *substance* of its licensing requirement as to emergency preparedness.

47 Fed. Reg. at 30232-33.[3] Finally, the regulation makes it clear that only the *plans* for onsite and offsite emergency responses are subject to Section 189(a) hearing requirements. *See* 10 C.F.R. § 50.47(a)(2); 47 Fed. Reg. at 30233. Thus, just as for the final *inspection and pre-operational testing* of the plant, no initial hearing rights attach to review of the results of required emergency exercises. The initial formal hearings concerning licensing authorization will not embrace the exercise or final testing results, although the Commission may in its discretion allow for such an expansion of hearings after exercises have been conducted. Beyond this possibility, according to the NRC, a hearing may be held only upon a motion by a party to reopen a concluded licensing hearing, or in conjunction with a well-grounded petition under 10 C.F.R. § 2.206 to modify, suspend, or revoke a license. *See* 47 Fed. Reg. at 30233.

I would uphold this rulemaking. The Commission's determination that the results of emergency exercises may not be injected into the Section 189(a) licensing hearings is entirely consistent with the predictive nature of the emergency preparedness finding that the NRC has bound itself to make, and does not conflict with the statutory hearing requirement. It is my view that in reviewing the NRC's rule, we should not apply an overly literal interpretation to Section 189(a), against the basic legislative intent expressed throughout the statute. A statute is to be read in its entirety, and as Judge Learned Hand once observed, "[t]here is no surer way to misread any document than to read it literally . . . ." *Guiseppi v. Walling*, 144 F.2d 608, 624 (2d Cir. 1944) (L. Hand, J., concurring). And to this should be added that a sentence of an act should rarely be read literally against the intent that permeates the rest of an act. As we observed concerning the broad congressional intent expressed in the Atomic Energy Act:

---

[3] Petitioner does not challenge this aspect of the rule amendment. *See* Brief for Petitioner at 4-5.

> Congress . . . enact[ed] a regulatory scheme which is virtually unique in the degree to which broad responsibility is reposed in the administering agency, *free of close prescription* in its charter as to how it shall proceed in achieving the statutory objectives.

Siegel v. Atomic Energy Commission, 400 F.2d 778, 783 (D.C. Cir. 1968) (citing *Power Reactor Development Co. v. International Union of Electrical, Radio & Machine Workers*, 367 U.S. 396, 81 S.Ct. 1529, 6 L.Ed.2d 924 (1961)) (emphasis added). The specific language of Section 189(a) should not be applied contrary to the context of the Act to bring about more than is required by that section or by the statute as a whole.

Mindful of its tremendous safety responsibilities under the Atomic Energy Act, the Commission has been extremely vigilant in requiring and updating very substantial safety measures to deal with the potential of radiological emergencies. The NRC's existing emergency preparedness regulations are a good example. The Commission, in order to ensure that adequate plans exist to deal with emergencies, both onsite and offsite of nuclear plants, has promulgated sixteen specific standards that emergency response plans must meet.[4] Some of these

---

[4] 10 C.F.R. § 50.47(b) provides:

> (b) The onsite and, except as provided in paragraph (d) of this section, offsite emergency response plans for nuclear power reactors must meet the following standards: *
>
> (1) Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augument its initial response on a continuous basis.
>
> (2) On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is mantained at all times, timely augmentation of response capabilities is available and the interfaces among various on-

standards involve highly technical evaluations and require minute knowledge of the operation of nuclear power

---

site response activities and offsite support and response activities are specified.

(3) Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's nearsite Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.

(4) A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

(5) Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

(6) Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

(7) Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.

(8) Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

(9) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

(10) A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and

plants. There can be no doubt that the NRC, in promulgating these standards, has faithfully carried out its duty to ensure the safety of the public.

The questions before this Court, of course, do not involve all of the standards, but rather revolve around the singular (b)(14) requirement of emergency preparedness exercises. The nub of this case is whether review of the results of these exercises must be included within public hearings under Section 189(a). In essence, the Union of Concerned Scientists is attempting to compel the Commission to change its regulations so that the emergency *exercises* will be treated as part of a licensing proceeding that may be subjected to a hearing, rather than as part

---

the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

(11) Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

(12) Arrangements are made for medical services for contaminated injured individuals.

(13) General plans for recovery and reentry are developed.

(14) Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

(15) Radiological emergency response training is provided to those who may be called on to assist in an emergency.

(16) Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

* These standards are addressed by specific criteria in NUREG-0654; FEMA-REP-1 entitled "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants—for Interim Use and Comment", January 1980.

of the final pre-operational testing. Thus, petitioner seeks to inject the results of exercises into the formal hearing process. This effort is inconsistent with the Commission's substantive determination that the required finding as to emergency preparedness is predictive in nature.

In this rule, the NRC in the exercise of the judgment conferred upon it by the statute, has sought to treat compliance with these exercise requirements on the same basis as it does its pre-operational tests of the plant itself. The two are very similar in nature and go hand-in-hand. The Atomic Energy Act has never been interpreted to require hearings on the results of the final preoperational tests. This interpretation of an Act which was first adopted in 1946, and the subsequent agency practice in an area over which Congressional oversight has been at its zenith, should not be ignored. Hearings inevitably involve considerable delays, which can be extremely costly, especially as the plant nears complete readiness for full power operation, and as all employees necessary to start operations are employed and on duty. The NRC has concluded, quite sensibly in my view, that exercises conducted to test emergency plans, which are coordinated with public participation, would best be conducted close to the pre-operation testing of the plant itself.[5] They both fit into the same regulatory scheme and require that plant operating personnel be on station.

The NRC's regulation does not exclude the interested public from participating in the process of developing emergency preparedness. Far from it—the overall procedures set forth by the Commission envision public participation at a number of different stages. First, the

---

[5] Concerning this point, the majority reads this opinion far too broadly. *See* Majority's Opinion at 1450, n. 24. Contrary to the majority's suggestions, I would not allow the NRC unbounded authority to replace all hearings with tests and inspections. This opinion is of course limited to the facts of this case, and to the NRC's particular rulemaking here under review—an administrative action which in my view is an entirely reasonable exercise of the Commission's broad statutory authority.

public has a role in actually formulating emergency plans, insofar as state and local governments must be involved in generating such plans, in coordination with the planning of the operator. Second, the basic plans for emergency responsiveness at any plant, concerning both onsite and offsite readiness, are subject to full hearings at the request of any interested person at the formal licensing stage. *See supra.* Third, when the plans are subsequently tested, the public participates in the exercises themselves. Fourth, the Federal Emergency Management Agency (FEMA) participates as an outside expert in the evaluation of the emergency exercises, and thereby has a role in guaranteeing that preparedness is adequate and that serious deficiencies will not be overlooked. *See* 10 C.F.R. § 50.47(a)(2); 47 Fed. Reg. at 30235-36. Finally, in the event that such deficiencies develop through the results of the exercises, the Commission assures that a previously concluded hearing could be reopened at the request of a party. *See* 47 Fed. Reg. at 30233. Thus, a hearing is not foreclosed in a proper case.

That this final possibility for reopening of a public hearing poses a somewhat higher entry standard for would-be litigants is not disconcerting. A higher threshold is justified in view of the extensive prior consideration and evaluation of the actual exercises to which emergency plans will have been subjected. Minor complaints should not be encouraged, particularly at this late stage, because of the tremendous delay and the enormous cost that they can occasion—up to two years in cases where the Commission's decisions are appealed to courts.[6]

---

[6] The majority suggests that delays and associated costs may be partly reduced by various methods of expediting hearings. Majority Opinion at 1448-1449, n. 21. I am of the firm opinion, however, that this Court's decision today—notwithstanding the majority's rather unrealistic reliance on so-called expediting procedures, which are largely untested and unproven—will result in substantial delays and costs. Such judicially-imposed delays are endemic in attempts to bring nuclear power projects into operation. *See, e.g., People Against Nuclear Energy v. United States Nuclear Regulatory*

In practice, if petitioners prevail, it will be necessary—unless very substantial delay in the opening of full power operation is to result—to move up the emergency testing exercises, removing them further from the opening of plant operation. In such event, not only would the exercises themselves be less valuable, but this shift would also require preliminary employment of full operating personnel for a longer period, with an attendant substantial increase in the costs of bringing a plant into operation. These are very serious impracticalities, to which the NRC has given close attention in choosing an alternative course. The Commission has no mandate to construe its charter statute so as to maximize the delay in its administration. Accordingly, I must dissent from the Court's decision in this case.

Comm'n, 678 F.2d 222 (D.C. Cir. 1982), *rev'd sub. nom. Metropolitan Edison Co. v. People Against Nuclear Energy*, —— U.S. ——, 103 S.Ct. 1556, 75 L.Ed.2d 534 (1983); *Porter County Chapter of the Izaak Walton League of America, Inc. v. Nuclear Regulatory Comm'n*, 606 F.2d 1363, 1366 & n. 5-6 (D.C. Cir. 1979). Delays in this area are so numerous and so costly that the public will be paying billions of dollars for years to come. A very recent editorial addresses the tremendous cost of the numerous delays in the construction of nuclear power plants in the United States. Navarro, *Seabrook Failure: Only in America*, N.Y. Times, May 15, 1984, at A29, col. 1. Focusing on the example of the Seabrook, New Hampshire, nuclear plant, the author points out that construction delays for years through protracted legal interventions, effective obstruction of its licensing process, and other related delays, has substantially increased both interest charges and construction costs on the plant—to the extent that the total cost has soared to around $6 billion. The same plant could have been built in France for one-sixth the cost. *Id.*

APPENDIX B

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

September Term, 1983

No. 82-2053

UNION OF CONCERNED SCIENTISTS,
Petitioner

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION and UNITED STATES OF AMERICA,
Respondents

ATTORNEY GENERAL OF MASSACHUSETTS, ARKANSAS POWER & LIGHT CO., *et al.*,
Intervenors

[Filed Aug. 3, 1984]

Before: Wald and Ginsburg, Circuit Judges, and MacKinnon, Senior Circuit Judge

ORDER

On consideration of the Petition for Rehearing of Respondents, filed July 9, 1984, it is

ORDERED by the Court that the aforesaid Petition for Rehearing is denied.

Per Curiam
For the Court:

/s/ George A. Fisher
GEORGE A. FISHER,
Clerk

Senior Circuit Judge MacKinnon would grant the petition for rehearing.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

September Term, 1983

No. 82-2053

UNION OF CONCERNED SCIENTISTS,
Petitioner

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION
and UNITED STATES OF AMERICA,
Respondents

ATTORNEY GENERAL OF MASSACHUSETTS,
ARKANSAS POWER & LIGHT CO., *et al.*,
Intervenors

[Filed Aug. 3, 1984]

Before: Robinson, Chief Judge; Wright, Tamm, Wilkey, Wald, Mikva, Edwards, Ginsburg, Bork, Scalia and Starr, Circuit Judges

ORDER

The Suggestion for Rehearing *en banc* of Respondents, filed July 9, 1984, has been circulated to the full Court and a majority of the Judges in regular active service have not voted in favor thereof. On consideration of the foregoing, it is

ORDERED by the Court *en banc* that the aforesaid Suggestion is denied.

Per Curiam
For the Court:

/s/ George A. Fisher
GEORGE A. FISHER,
Clerk

Circuit Judges Wilkey and Scalia would grant the suggestion for rehearing *en banc*.

APPENDIX C

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 50 and 70

Emergency Planning

AGENCY: U.S. Nuclear Regulatory Commission

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission is upgrading its emergency planning regulations in order to assure that adequate protective measures can and will be taken in the event of a radiological emergency. Nuclear power plants and certain other licensed facilities are required to submit their emergency plans, together with the emergency response plans of State and local governments, to the Commission. The Commission and the Federal Energy Management Agency will review the plans for adequacy. The amendment also extends emergency planning considerations to "Emergency Planning Zones", and makes additional clarifications.

EFFECTIVE DATE: November 3, 1980.

Note.—The Nuclear Regulatory Commission has submitted this rule to the Comptroller General for review of the reporting requirements in the rule, pursuant to the Federal Reports Act, as amended (44 U.S.C. 3512). The date on which the reporting requirements of the rule became effective includes a 45-day period, which the statute allows for Comptroller General review (44 U.S.C. 3512 (c) (2)).

FOR FURTHER INFORMATION CONTACT: Mr. Michael T. Jamgochian, Office of Standards Development, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 (telephone: 301-443-5966).

SUPPLEMENTARY INFORMATION: On September 19, 1979 and on December 19, 1979, the Commission published for

public comment (44 FR 54308 and 44 FR 75167) proposed amendments to its emergency planning regulations for production and utilization facilities. Extensive comments were received, all of which were evaluated and considered in developing the final rule. The comments received and the staff's evaluation is contained in NUREG-0684. In addition, the NRC conducted four Regional Workshops to solicit comments; these comments are available in NUREG/CP-0011 (April 1980).[1]

The final regulation contains the following elements:

1. In order to continue operations or to receive an operating license an applicant/licensee will be required to submit its emergency plans, as well as State and local governmental emergency response plans, to NRC. The NRC will then make a finding as to whether the state of onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base its finding on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and capable of being implemented and on the NRC assessment as to whether the licensee's/applicant's emergency plans are adequate and capable of being implemented. These issues may be raised in NRC operating license hearings, but a FEMA finding will constitute a rebuttable presumption on the question of adequacy,

2. Emergency planning considerations will be extended to "Emergency Planning Zones,"

---

[1] Copies of NUREG documents are available at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555. Copies may be purchased from the Government Printing Office. Information on current prices may be obtained by writing the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Publications Sales Manager.

3. Detailed emergency plan implementing procedures of licensees/applicants will be required to be submitted to NRC for review, and

4. Requirements in 10 CFR Part 50, Appendix E are clarified and upgraded.

Background

In June 1979, the Nuclear Regulatory Commission began a formal reconsideration of the role of emergency planning in ensuring the continued protection of the public health and safety in areas around nuclear power facilities. The Commission began this reconsideration in recognition of the need for more effective emergency planning and in response to the TMI accident and to reports issued by responsible offices of government and the NRC's Congressional oversight committees.

On December 19, 1979, the Nuclear Regulatory Commission published in the *Federal Register* (44 FR 75167) proposed amendments to 10 CFR Part 50 and Appendix E to Part 50 of its regulations. Publication of these final rule changes in the *Federal Register* is not only related to the December 19, 1979 proposed rule changes but also incorporates the proposed changes to 10 CFR Parts 50 and 70 (44 FR 54308) published on September 19, 1979. Interested persons were invited to submit written comments/suggestions in connection with the proposed amendments within 60 days after publication in the *Federal Register*. During this comment period (in January 1980) the Commission conducted four regional workshops with State and local officials, utility representatives, and the public to discuss the feasibility of the various portions of the proposed amendments, their impact, and the procedures proposed for complying with their provisions. The NRC used the information from these workshops along with the public comment letters to develop the final rule (more than 200 comment letters and the points made in two petitions for rulemaking were also considered).

In addition to the above, on June 25, 1980, the Commission was briefed by three panels of public commenters on the rule, one each comprised of representatives from the industry, State and local governments, and public interest groups. Each panel rais d important concerns regarding the final rule. On July 3, 1980, the Commission was briefed by its staff in response to these panels, including several modifications to the proposed final rules. Finally, on July 23, 1980, at the final Commission consideration of these rules, the Commission was briefed by the General Counsel on the substance of conversations with Congressional staff members who were involved with passage of the NRC Authorization Act for fiscal year 1980, Pub. L. No. 96-295. The General Counsel advised the Commisison that the NRC final rules were consistent with that Act. The Commission has relied on all of the above information in its consideration of these final rules. In addition, the Commission directs that the transcripts of these meetings shall be part of the administrative record in this rulemaking. However, the transcripts have not been reviewed for accuracy and, therefore, are only an informal record of the matters discussed.

After evaluating all public comment letters received and all the information obtained during the workshops as well as additional reports such as the Presidential Commission and the NRC Special Inquiry Group Reports, the Commission has decided to publish the final rule changes described below.

Description of Final Rule Changes

The Commission has decided to adopt a version of the proposed rules similar to alternative A described in Sections 50.47 and 50.54 in the *Federal Register* Notice dated December 19, 1979 (44 FR 75167), as modified in light of comments. These rules are consistent with the approach outlined by FEMA and NRC in a Memorandum of Understanding (45 FR 5847, January 24, 1980). No new operating license will be granted unless the NRC can

make a favorable finding that the integration of onsite and offsite emergency planning provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. In the case of an operating reactor, if it is determined that there are such deficiencies that a favorable NRC finding is not warranted and if the deficiencies are not corrected within 4 months of that determination, the Commission will determine expeditiously whether the reactor should be shut down or whether some other enforcement action is appropriate, pursuant to procedures provided for in 10 CFR 2.200-2.206. In any case where the Commission believes that the public health, safety, or interest so requires, the plant will be required to shut down immediately (10 CFR 2.202(f), see 5 U.S.C. 558(c)).

The standards that the NRC will use in making its determinations under these rules are set forth in the final regulation. Wherever possible, these standards may blend with other emergency planning procedures for nonnuclear emergencies presently in existence. The standards are a restatement of basic NRC and now joint NRC-FEMA guidance to licensees and to State and local governments. See NUREG-0654; FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants for Interim Use and Comment," (January 1980). In deciding whether to permit reactor operation in the face of some deficiencies, the Commission will examine among other factors whether the deficiences, are significant for the reactor in question, whether adequate interim compensatory actions have been or will be taken promptly, or whether other compelling reasons exist for reactor operation. In determining the sufficiency of "adequate interim compensatory actions" under this rule, the Commission will examine State plans, local plans, and licensee plans to determine whether features of one plan can compensate for deficiencies in another plan so that the

level of protection for the public health and safety is adequate. This interpretation is consistent with the provisions of the NRC Authorization Act for fiscal year 1980, Pub. L. 96-295.

The regulation contains the following three major changes from past practices:

1. In order to continue operations or to receive an operating license, an applicant/licensee will be required to submit its emergency plans, as well as State and local governmental emergency response plans, to NRC. The NRC will then make a finding as to whether the state of onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

The NRC will base its finding on a review of the FEMA findings and determinations as to whether State and local emergency plans are adequate and capable of being implemented and on the NRC assessment as to whether the applicant's/licensee's emergency plans are adequate and capable of being implemented. In any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on the question of adequacy. Specifically:

a. An operating license will not be issued unless a favorable NRC overall finding can be made.

b. After April 1, 1981, an operating plant may be required to shut down if it is determined that there are deficiencies such that a favorable NRC finding cannot be made or is no longer warranted and the deficiencies are not corrected within 4 months of that determination.

2. Emergency planning considerations must be extended to "Emergency Planning Zones," and

3. Detailed emergency planning implementing procedures of both licensees and applicants for operating licenses must be submitted to NRC for review.

In addition, the Commission is revising 10 CFR Part 50, Appendix E, "Emergency Plans for Production and Utilization Facilities," in order to clarify, expand, and upgrade the Commission's emergency planning regulations. Sections of Appendix E that are expanded include:

1. Specification of "Emergency Action Levels" (Sections IV.B and C)

2. Dissemination to the public of basic emergency planning information (Section IV.D)

3. Provisions for the State and local governmental authorities to have a capability for rapid notification of the public during a serious reactor emergency, with a design objective of completing the initial notification within 15 minutes after notification by the licensee (Section IV.D)

4. A licensee onsite technical support center and a licensee near site emergency operations facility (Section IV.E)

5. Provisions for redundant communications systems (Section IV.E)

6. Requirement for specialized training (Section IV.F)

7. Provisions for up-to-date plan maintenance (Section IV.G)

Applicants for a construction permit would be required to submit more information as required in the new Section II of Appendix E.

Rationale for the Final Rules

The Commission's final rules are based on the significance of adequate emergency planning and preparedness to ensure adequate protection of the public health and

safety. It is clear, based on the various official reports described in the proposed rules (44 FR 75169) and the public record compiled in this rulemaking, that onsite and offsite emergency preparedness as well as proper siting and engineered design features are needed to protect the health and safety of the public. As the Commission reacted to the accident at Three Mile Island, it became clear that the protection provided by siting and engineered design features must be bolstered by the ability to take protective measures during the course of an accident. The accident also showed clearly that onsite conditions and actions, even if they do not cause significant offsite radiological consequences, will affect the way the various State and local entities react to protect the public from any dangers associated with the accident. In order to discharge effectively its statutory responsibilities, the Commission must know that proper means and procedures will be in place to assess the course of an accident and its potential severity, that NRC and other appropriate authorities and the public will be notified promptly, and that adequate protective actions in response to actual or anticipated conditions can and will be taken.

The Commission's organic statutes provide it with a unique degree of discretion in the execution of agency functions. *Siegel* v. *AEC*, 400 F.2d 778, 783 (D.C. Cir. 1968), see *Westinghouse Electric Corp.* v. *NRC*, 598 F.2d 759, 771 & n.47 (3d Cir. 1979). "Both the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974 confer broad regulatory functions on the Commission and specifically authorize it to promulgate rules and regulations it deems necessary to fulfill its responsibilities under the Acts, 42 U.S.C. § 2201(p)." *Public Service Co. of New Hampshire* v. *NRC*, 582 F.2d 77, 82 (1st Cir.), *cert. denied*, 439 U.S. 1046 (1978). *See* 42 U.S.C. 2133 (a). As the Supreme Court stated almost 20 years ago, the Atomic Energy Act "clearly contemplates that the Commission shall by regulation set forth what the public

safety requirements are as a prerequisite to the issuance of any license or permit under the Act," *Power Reactor Development Co.* v. *International Union of Electrical Radio Machine Workers*, 367 U.S. 396, 404 (1961). Finally, it is also clear that "Congress, when it enacted [42 U.S.C. 2236] . . ., must have envisioned that licensing standards, especially in the areas of health and safety regulation, would vary over time as more was learned about the hazards of generating nuclear energy. Insofar as those standards became more demanding, Congress surely would have wanted the new standards, if the Commission deemed it appropriate, to apply to those nuclear facilities already licensed," *Ft. Pierce Utilities Authority* v. *United States*, 606 F.2d 986, 996 (D.C. Cir. 1979).

In response to and guided by the various reports and public comments, as well as its own determination on the significance of emergency preparedness, the Commission has therefore concluded that adequate emergency preparedness is an essential aspect in the protection of the public health and safety. The Commission recognizes there is a possibility that the operation of some reactors may be affected by this rule through inaction of State and local governments or an inability to comply with these rules. The Commission believes that the potential restriction of plant operation by State and local officials is not significantly different in kind or effect from the means already available under existing law to prohibit reactor operation, such as zoning and land-use laws, certification of public convenience and necessity, State financial and rate considerations (10 CFR 50.33(f)), and Federal environmental laws. The Commission notes, however, that such considerations generally relate to a one-time decision on siting, whereas this rule requires a periodic renewal of State and local commitments to emergency preparedness. Relative to applying this rule in actual practice, however, the Commission need not shut down a facility until all factors have been thoroughly

examined. The Commission believes, based on the record created by the public workshops, that State and local officials as partners in this undertaking will endeavor to provide fully for public protection.

Summary of Comments on Major Issues

The Commission appreciates the extensive public comments on this important rule. In addition to the record of the workshops, the NRC has received over 200 comment letters on the proposed rule changes. The following major issues have been raised in the comments received.

Issue A: NRC Review and Concurrence in State and Local Radiological Plans

1. FEMA is best suited to assess the adequacy of State and local radiological emergency planning and preparedness and report any adverse findings to NRC for assessment of the licensing consequences of those findings.

2. The proposed rule fails to provide objective standards for NRC concurrence, reconcurrence, and withdrawal of concurrence.

3. In the absence of additional statutory authority, the proposed rule frustrates Congressional intent to preempt State and local government veto power over nuclear power plant operation.

4. Procedures and standards for adjudication of emergency planning disputes are not adequately specified in the proposed rule.

Issue B: Emergency Planning Zones (EPZs)

1. Regulatory basis for imposition of the Emergency Planning Zone concept should be expressly stated in the regulation.

2. Provisions regarding the plume exposure pathway EPZ should provide a maximum planning distance of 10 miles.

3. References to NUREG-0396 should be deleted to avoid disputes over its meaning in licensing proceedings.

Issue C: Alternative A and B (in 50.47 and 50.54)

1. Neither alternative is necessary because the Commission has sufficient authority to order a plant shut down for safety reasons and should be prepared to exercise that authority only on a case-by-case basis and when a particular situation warrants such action.

2. No case has been made by the Commission for the need for automatic shutdown, as would be required in alternative B, and certainly no other NRC regulations exist that would require such action based on a concept as amorphous as "concurrence in State and local emergency plans."

3. The idea that the Commission might grant an exemption to the rules that would permit continued operation (under alternative B) has little significance, primarily because 10 CFR Part 50.12(a) already permits the granting of exemptions.

4. The process and procedures for obtaining such exemptions are not defined, nor is there any policy indication that would indicate the Commission's disposition to grant such exemptions.

5. The Commission, in developing this aspect of the proposed rule, must consider its own history. There was time when regulation was characterized by the leaders of the agency by simple and very appropriate expressions. The process was to be "effective and efficient." The application of regulatory authority was to be "firm, but fair." Regardless of the outcome of the "concurrence" issue, the Commission must appreciate that alternative B is not fair. It is not effective regulation.

Issue D: Public Education

Only information required to inform the public about what to do in the event of a radiological emergency need be disseminated. There should be flexibility, in any particular case, as to who will be ultimately responsible for disseminating such information.

Issue E: Legal Authority

1. A few commenters felt that NRC had no authority to promulgate a rule as the one proposed.

2. Other comments were the nature that NRC has statutory authority only inside the limits of the plant site.

3. Some commenters suggested that NRC and FEMA should seek additional legislation to compel State and local governments to have emergency plans, if that is what is necessary.

Issue F: Schedule for Implementation

The schedule for implementing the proposed rule was considered to be unrealistic and in some cases in conflict with various State schedules already in existence. A sampling of the comments on the implementation schedule follows:

1. The 180 days in the schedule is an insufficient amount of time to accomplish tasks of this magnitude; the Federal government does not work with such speed. States are bureaucracies also; there is no reason to assume they can work faster. It took years of working with States to get the plans that are presently concurred in. It is just insufficient time for new concurrences and review. Also, to get a job done within that time frame means a hurried job, rather than an acceptable and meaningful plan.

2. The time provided is inadequate for States to acquire the hardware needed. States must go out for com-

petitive bids just as the Federal government does. Between processing and accepting a bid and actual delivery of equipment, it may take a year to get the hardware. The State budgets years ahead; therefore, if a State or local government needs more money, it may have to go to the legislature. This is a time-consuming public process that may not fit the Federal schedule.

3. NRC and FEMA could not review 70 or more plans and provide concurrence by January 1, 1981. The Federal government moves slowly. Commenters did not think that NRC and FEMA can review all the plans within the time frame scheduled. If the Federal government cannot meet its schedule, why or how should the States?

4. Funding could not be appropriated by State and local governments before the deadline. It was suggested that the Commission use H. Rept. #96-413, "Emergency Planning U.S. Nuclear Power Plants: Nuclear Regulatory Commission Oversight," for the time frame rather than in the proposed rule or use a sliding-scale time frame since States are at various stages of completing their emergency plans.

Issue G: Impact of Proposed Rule

1. The proposed regulations were considered by some commenters as unfair to utilities because it was felt they place the utilities in the political and financial role that FEMA should be assuming. NRC is seen as in effect giving State and local governments veto over the operation of nuclear plants. It was questioned whether this was an intent of the rule. In addition, it was felt that utilities, their customers, and their shareholders should not be penalized by a shutdown (with a resulting financial burden) because of alleged deficiencies or lack of cooperation by State and local officials.

2. It was suggested that NRC's Office of Inspection and Enforcement conduct the reviews of the State and

local governmental emergency response plans in order to ensure prompt, effective, and consistent implementation of the proposed regulations.

3. One commenter noted that the public should be made aware of the issue of intermediate and long-term impacts of plant shutdowns. Specifically, people should be informed of the possibility of "brownouts," cost increases to the consumer due to securing alternative energy sources, and the health and safety factors associated with those alternative sources.

Issue H: Public Notification

1. Ultimate responsibility for public notification of a radiological emergency must be placed on State and local government.

2. The "fifteen minute" public notification rule is without scientific justification, fails to differentiate between areas close in and further away from the site, and ignores the technical difficulties associated with such a requirement.

Issue I: Emergency Action Levels

Applicants, in cooperation with State and local governmental authorities, should be permitted the necessary flexibility to develop emergency action level criteria appropriate for the facility in question, subject to NRC approval. Inflexible NRC emergency action level standards are not necessary.

Issue J: Training

1. Mandatory provision for training local service personnel and local news media persons is outside of NRC's jurisdiction and is not necessary to protect the public health and safety.

2. Public participation in drills or critiques thereof should not be required.

3. The provision regarding formal critiques should be clarified to mean the licensee is responsible for developing and conducting such critiques.

4. Definitive performances criteria for evaluation of drills should be developed by the licensee, subject to NRC approval.

Issue K: Implementing Procedures

NRC review of implementing procedures is only necessary to apprise the NRC staff of the details of the plans for use by the NRC during the course of an actual emergency.

Issue L: Funding

1. Nuclear facilities, although located in one governmental tax jurisdiction and taxed by that jurisdiction, affect other jurisdictions that must bear immediate and long-term planning costs without having access to taxes from the facility.

2. As the radius of planning requirements become greater, few facilities are the concern of a single county. The planning radius often encompasses county lines, State lines, and in some instances, international boundaries.

3. As new regulations are generated to oversee the nuclear industry and old ones expanded, there is an immediate need to address fixed nuclear facility planning at all levels of government, beginning at the lowest and going to the highest. All levels of government need access to immediate additional funds to upgrade their response capability.

4. It is well understood that the consumer ultimately must pay the price for planning, regardless of the level in government at which costs are incurred. It becomes a matter of how the consumer will be taxed, who will

administer the tax receipts, and what is the most effective manner in which to address the problem.

5. The basis for effective offsite response capabilities is a sound emergency preparedness program. Federal support (funding and technical assistance) for the development of State and local offsite capabilities should be incorporated into FEMA's preparedness program for all emergencies.

Issue M: General

The States support Federal oversight and guidance in the development of offsite response capabilities. However, many States feel the confusion and uncertainty in planning requirements following Three Mile Island is not a proper environment in which to develop effective capabilities nor does it serve the best interests of their citizens. The development of effective nuclear facility incident response capabilities will require close coordination and cooperation among responsible Federal agencies, State government, and the nuclear industry. An orderly and comprehensive approach to this effort makes it necessary that onsite responsibilities be clearly associated with NRC and the nuclear industry while deferring offsite responsibilities to State government with appropriate FEMA oversight and assistance.

In addition to these comments, two petitions for rulemaking were filed in reference to the proposed rule. These were treated as public comments rather than petitions and were considered in developing the final rule.

The Commission has placed the planning objectives from NUREG-0654; FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants for Interim Use and Comment," January 1980, into the final regulations. Comments received concerning NUREG-0654 were available in developing the

final regulation. The Commission notes that the planning objectives in NUREG-0654 were largely drawn from NUREG-75/111, "Guide and Checklist for Development and Evaluation of State and Local Government Radiological Emergency Response Plans in Support of Fixed Nuclear Facilities," (December 1, 1974) and Supplement 1 thereto dated March 15, 1977, which have been in use for some time.

The approximately 60 public comment letters received on NUREG-0654 were not critical of the proposed planning objectives. The Commission also notes that at the May 1, 1980 ACRS meeting, the Atomic Industrial Forum representative encouraged the use of the planning objectives from NUREG-0654 in the final regulations in order to reduce ambiguity and provide specificity to the final regulation.

Based on the above, the Commission has decided to modify the proposed rule changes in the areas discussed in paragraphs I through X below.

I. FEMA/NRC Relationship

In issuing this rule, NRC recognizes the significant responsibilities assigned to FEMA, by Executive Order 12148 on July 15, 1979, to coordinate the emergency planning functions of executive agencies. In view of FEMA's new role, NRC agreed on September 11, 1979, that FEMA should henceforth chair the Federal Interagency Central Coordinating Committee for Radiological Emergency Response Planning and Preparedness (FICCC). On December 7, 1979, the President issued a directive assigning FEMA lead responsibility for offsite emergency preparedness around nuclear facilities. The NRC and FEMA immediately initiated negotiations for a Memorandum of Understanding (MOU) that lays out the agencies' roles and provides for a smooth transfer of responsibilities. It is recognized that the MOU, which became effective January 14, 1980, supersedes some as-

pects of previous agreements. Specifically, the MOU identifies FEMA responsibilities with respect to emergency preparedness as they relate to NRC as the following:

1. To make findings and determinations as to whether State and local emergency plans are adequate.

2. To verify that State and local emergency plans are capable of being implemented (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualification, and equipment).

3. To assume responsibility for emergency perparedness training of State and local officials.

4. To develop and issue an updated series of interagency assignments that delineate respective agency capabilities and responsibilities and define procedures for coordination and direction for emergency planning and response.

Specifically, the NRC responsibilities for emergency preparedness identified in the MOU are:

1. To assess licensee emergency plans for adequacy.

2. To verify that licensee emergency plans are adequately implemented (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment).

3. To review the FEMA findings and determinations on the adequacy and capability of implementation of State and local plans.

4. To make decisions with regard to the overall state of emergency preparedness (i.e., integration of the licensee's emergency preparedness as determined by the NRC and of the State/local governments as determined by FEMA and reviewed by NRC) and issuance of operating licenses or shutdown of operating reactors.

In addition, FEMA has prepared a proposed rule regarding "Review and Approval of State Radiological Emergency Plans and Preparedness" (44 FR 42342, dated June 24, 1980). According to the proposed FEMA rule, FEMA will approve State and local emergency plans and preparedness, where appropriate, based upon its findings and determinations with respect to the adequacy of State and local plans and the capabilities of State and local governments to effectively implement these plans and preparedness measures. These findings and determinations will be provided to the NRC for use in its licensing process.

II. Emergency Planning Zone Concept

The Commission notes that the regulatory basis for adoption of the Emergency Planning Zone (EPZ) concept is the Commission's decision to have a conservative emergency planning policy in addition to the conservatism inherent in the defense-in-depth philosophy. This policy was endorsed by the Commission in a policy statement published on October 23, 1979 (44 FR 61123). At that time the Commission stated that two Emergency Planning Zones (EPZs) should be established around each light-water nuclear power plant. The EPZ for airborne exposure has a radius of about 10 miles; the EPZ for contaminated food and water has a radius of about 50 miles. Predetermined protective action plans are needed for the EPZs. The exact size and shape of each EPZ will be decided by emergency planning officials after they consider the specific conditions at each site. These distances are considered large enough to provide a response base that would support activity outside the planning zone should this ever be needed.

III. Position on Planning Basis for Small Light-Water Reactors and Ft. St. Vrain

The Commission has concluded that the operators of small light-water-cooled power reactors (less than 250

MWt) and the Ft. St. Vrain gas-cooled reactor may establish smaller planning zones which will be evaluated on a case-by-case basis. This conclusion is based on the lower potential hazard from these facilities (lower radionuclide inventory and longer times to release significant amounts of activity in many scenarios). Guidance regarding the radionuclides to be considered in planning is set forth in NUREG-0396; EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light-Water Nuclear Power Plants," December 1978.

IV. Rationale for Alternatives Chosen

In a few areas of the proposed rule, the Commission identified two alternatives that it was considering. Many public comments were received on these alternatives; based on due consideration of all comments received as well as the discussions presented during the workshops, the Commission has determined which of each pair of alternatives to retain in the final rule.

In Sections 50.47 and 50.54(s) and (t), the alternatives dealth with conditioning the issuance of an operating license or continued operation of a nuclear power plant on the existence of State and local government emergency response plans concurred in by NRC.* The basic difference between alternatives A and B in these sections was that, under alternative A, the proposed rule would require a determination by NRC on issuing a license or permitting continued operation of plants in those cases where relevant State and local emergency response plans had not received NRC concurrence. Denial of a license or shutdown of a reactor would not follow automatically in every case. Under alternative B, shutdown of the reactor would be required automatically

* See Section V for a discussion concerning "concurrence."

if the appropriate State and local emergency response plans had not received NRC concurrence within the prescribed time periods unless an exemption is granted.

After consideration of the public record and on the recommendation of its staff, the Commission has chosen a text for Sections 50.47 and 50.54(s) and (t) that is similar to, but less restrictive than, alternative A in the proposed rule. Rather than providing for the shutdown of the reactor as the only enforcement action and prescribing specific preconditions for the shutdown remedy, the final rule makes clear that for emergency planning rules, like all other rules, reactor shutdown as outlined in the rule is but one of a number of possible enforcement actions and many factors should be considered in determining whether it is an appropriate action in a given case. This Commission choice is consistent with most of the comments received from State and local governments and is consistent with the provisions of Section 109 of the NRC fiscal year 1980 Authorization Act. Alternative B was seen by some of the commenters as potentially causing unnecessarily harsh economic and social consequences to State and local governments, utilities, and the public.

State and local governments that are directly involved in implementing planning objectives of the rule strongly favor alternative A since it provides for a cooperative effort with State and local governments to reflect their concerns and desires in these rules. This choice is responsive to that effort. In addition, the industry strongly supported alternative A as being the more workable of the two alternatives.

In Appendix E, Sections II.C and III, alternative A would require an applicant/licensee to outline ". . . corrective measures to prevent damage to onsite and offsite property," as well as protective measures for the public. Alternative B addresses only protective measures for the public health and safety. The Commission has chosen

alternative B because public health and safety should take clear precedence over actions to protect property. Measures to protect property can be taken on an ad hoc basis as resources become available after an accident.

In Appendix E, under Training, alternative A would provide for a joint licensee, Federal, State, and local government exercise every 3 years, whereas alternative B would provide for these exercises to be performed every 5 years at each site. The Commission has chosen alternative B because the Commission is satisfied that the provision that these exercises be performed every 5 years for each site will allow for an adequate level of preparedness among Federal emergency response agencies. In addition, under these regulations, each licensee is required to exercise annually with local governmental authorities. Furthermore, Federal emergency response agencies may have difficulty supporting exercises every 3 years for all of the nuclear facilities that would be required to comply with these rule changes.

V. Definition of Plan Approval Process

The term "concurrence" has been deleted from the proposed regulations and replaced with reference to the actual procedure and standards that NRC and FEMA have agreed upon and are implementing. According to the agreed upon procedure, FEMA will make a finding and determination as to the adequacy of State and local government emergency response plans. The NRC will determine the adequacy of the licensee emergency response plans. After these two determinations have been made, NRC will make a finding in the licensing process as to the overall and integrated state of preparedness.

It was pointed out to the Commission at the workshops and in public comment letters that the term "concurrence" was confusing and ambiguous. Also, there was a great deal of misunderstanding with the use of

the term because, in the past, the obtaining of NRC "concurrence" in State emergency response plans was voluntary on behalf of the States and not a regulatory requirement in the licensing process. Previously too, "concurrence" was statewide rather than site-specific.

VI. Fifteen-Minute Notification

The requirement for the capability for notification of the public within 15 minutes after the State/local authorities have been notified by the licensee has been expanded and clarified. It also has been removed as a footnote and placed in the body of Appendix E. The implementation schedule for this requirement has been extended to July 1, 1981. This extension of time has been adopted because most State and local governments identified to the Commissior the difficulty in procuring hardware, contracting for installation, and developing procedures for operating the systems used to implement this requirement.

The Commission is aware that various commenters, largely from the industry, have objected to the nature of the 15-minute notification requirement, indicating that it may be both arbitrary and unworkable.

Among the possible alternatives to this requirement are a longer notification time, a notification time that varies with distance from the facility, or no specified time. In determining what that criterion should be, a line must be drawn somewhere, and the Commission believes that providing as much time as practicable for the taking of protective action is in the interest of public health and safety. The Commission recognizes that this requirement may present a significant financial impact and that the technical basis for this requirement is not without dispute. Moreover, there may never be an accident requiring using the 15-minute notification capability. However, the essential rationale behind emergency planning is to provide additional assurance for the

public protection even during such an unexpected event. The 15-minute notification capability requirement is wholly consistent with that rationale.

The Commission recognizes that no single accident scenario should form the basis for choice of notification capability requirements for offsite authorities and for the public. Emergency plans must be developed that will have the flexibility to ensure response to a wide spectrum of accidents. This wide spectrum of potential accidents also reflects on the appropriate use of the offsite notification capability. The use of this notification capability will range from immediate notification of the public (within 15 minutes) to listen to predesignated radio and television stations, to the more likely events where there is substantial time available for the State and local governmental officials to make a judgment whether or not to activate the public notification system.

Any accident involving severe fuel degradation or core melt that results in significant inventories of fission products in the containment would warrant immediate public notification and consideration, based on the particular circumstances, of appropriate protective action because of the potential for leakage of the containment building. In addition, the warning time available for the public to take action may be substantially less than the total time between the original initiating event and the time at which significant radioactive releases take place. Specification of particular times as design objectives for notification of offsite authorities and the public are a means of ensuring that a system will be in place with the capability to notify the public to seek further information by listening to predesignated radio or television stations. The Commission recognizes that not every individual would necessarily be reached by the actual operation of such a system under all conditions of system use. However, the Commission believes that provision of a general alerting system will significantly improve the

capability for taking protective actions in the event of an emergency. The reduction of notification times from the several hours required for street-by-street notification to minutes will significantly increase the options available as protective actions under severe accident conditions. These actions could include staying indoors in the case of a release that has already occurred or a precautionary evacuation in the case of a potential release thought to be a few hours away. Accidents that do not result in core melt may also cause relatively quick releases for which protective actions, at least for the public in the immediate plant vicinity, are desirable.

Some comments received on the proposed rule advocated the use of a staged notification system with quick notification required only near the plant. The Commission believes that the capability for quick notification within the entire plume exposure emergency planning zone should be provided but recognizes that some planners may wish to have the option of selectively actuating part of the system during an actual response. Planners should carefully consider the impact of the added decisions that offsite authorities would need to make and the desirability of establishing an official communication link to all residents in the plume exposure emergency planning zone when determining whether to plan for a staged notification capability.

VII. Effective Date of Rules and Other Guidance

Prior to the publication of these amendments, two guidance documents were published for public comment and interim use. These are NUREG-0610, "Draft Emergency Action Level Guidelines for Nuclear Power Plants," (September 1979) and NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants for Interim Use and Comment," (January 1980). It is expected that versions of these

documents, revised on the basis of public comments received, will be issued to assist in defining acceptable levels of preparedness to meet this final regulation. In the interim, these documents should continue to be used as guidance.

VIII. Hearing Procedures Used in Implementation of These Regulations

Should the NRC believe that the overall state of emergency preparedness at and around a licensed facility is such that there is some question whether a facility should be permitted to continue to operate, the Commission may issue an order to the licensee to show cause, pursuant to 10 CFR 2.202, why the plant should not be shut down. This issue may arise, for example, if NRC finds a significant deficiency in a licensee plan or in the overall state of emergency preparedness.

If the NRC decides to issue an order to show cause, it will provide the licensee the opportunity to demonstrate to the Commission's satisfaction, for example, that the alleged deficiencies are not significant for the reactor in question, whether adequate interim compensating actions have been or will be taken promptly, or whether other compelling reasons exist for reactor operation. Finally, pursuant to 10 CFR 2.202(f), the Commission may, in appropriate circumstances, make the order immediately effective, which could result in immediate plant shutdown subject to a later hearing.

IX. Funding

In view of the requirements in these rule changes regarding the actions to be taken in the event State and local government planning and preparedness are or become inadequate, a utility may have an incentive, based on its own self interest as well as its responsibility to provide power, to assist in providing manpower, items of

equipment, or other resources that the State and local governments may need but are themselves unable to provide. The Commission believes that in view of the President's Statement of December 7, 1979, giving FEMA the lead role in offsite planning and preparedness, the question of whether the NRC should or could require a utility to contribute to the expenses incurred by State and local governments in upgrading and maintaining their emergency planning and preparedness (and if it is to be required, the mechanics for doing so) is beyond the scope of the present rule change. It should be noted, however, that any direct funding of State or local governments solely for emergency preparedness purposes by the Federal government would come through FEMA.

X. Exercises

On an annual basis, all commercial nuclear power facilities will be required by NRC to exercise their plans; these exercises should involve exercising the appropriate local government plans in support of these facilities. The State may choose to limit its participation in exercises at facilities other than the facility (site) chosen for the annual exercise(s) of the State plan.

Each State and appropriate local government shall annually conduct an exercise jointly with a commercial nuclear power facility. However, States with more than one facility (site) shall schedule exercises such that each individual facility (site) is exercised in conjunction with the State and appropriate local government plans not less than once every 3 years for sites with the plume exposure pathway EPZ partially or wholly within the State, and not less than once every 5 years for sites with the ingestion exposure pathway EPZ partially or wholly within the State. The State shall choose, on a rotational basis, the site(s) at which the required annual exercise(s) is to be conducted; priority shall be given to new facilities seeking an operating license from NRC that

have not had an exercise involving the State plan at that facility site.

The Commission has determined under the criteria in 10 CFR Part 51 that an environmental impact statement for the amendments to 10 CFR Part 50 and Appendix E thereof is not required. This determination is based on "Environmental Assessment for Final Changes to 10 CFR Part 50 and Appendix E of 10 CFR Part 50, Emergency Planning Requirements for Nuclear Power Plants" (NUREG-0685, June 1980). Comments on the "Draft Negative Declaration; Finding of No Significant Impact" (45 FR 3913, January 21, 1980) were considered in the preparation of NUREG-0685.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Sections 552 and 553 of Title 5 of the United States Code, notice is hereby given that the following amendments to Title 10, Chapter I, Code of Federal Regulations, Parts 50 and 70, are published as a document subject to codification.

* * * *

(Sec. 161b., i., and o., Pub. L. 83-703, 68 Stat. 948 (42 U.S.C. 2201); Sec. 201, as amended, Pub. L. 93-438, 88 Stat. 1242, Pub. L. 94-79, 89 Stat. 413 (42 U.S.C. 5341))

Dated at Washington, D.C. this 11th day of August 1980.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

APPENDIX D

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Emergency Planning and Preparedness

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission is amending its regulations to clarify: (1) That emergency preparedness exercises are part of the preoperational inspection and thus required prior to operation above 5% of rated power, but not for a Licensing Board, Appeal Board, or Commission licensing decision; and (2) that for issuance of operating licenses authorizing only fuel loading and low power operation (up to 5% of rated power), no NRC or Federal Emergency Management Agency (FEMA) review, findings and determinations concerning the state or adequacy of offsite emergency preparedness shall be necessary.

EFFECTIVE DATE: July 13, 1982.

FOR FURTHER INFORMATION CONTACT: Michael T. Jamgochian, Human Factors Branch, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Telephone (301) 443-5942.

SUPPLEMENTARY INFORMATION: On December 15, 1981, the Commission published in the Federal Register two proposed rule changes (46 FR 61132 and 46 FR 61134). The proposed rule change in 46 FR 61134 was considered by the Commission as clarifying in nature. It proposed that 10 CFR 50.47(a)(1) be modified to clarify that the findings on emergency planning required prior to license issuance are predictive in nature and need not reflect the actual state of preparedness at the time

the finding is made. The amendment to 10 CFR 50.47 (a) (2) was proposed to emphasize the predictive nature of the review and to provide that licensing decisions need not include the results of an exercise. The Commission noted that preparedness connotes the actual state of implementation, is important during the life of the plant, and should be treated as an operational inspection matter. The proposed rule change would require that a full-scale exercise be conducted before operation above 5% of rated power and periodically thereafter.

The proposed rule change in 46 FR 61132 provided that in order to grant a low power license, only a finding as to the adequacy of onsite emergency planning and preparedness is required; that is, neither FEMA nor NRC must have evaluated the adequacy and capability of offsite preparedness organizations and plans prior to issuance of a low power license. While the proposed rule would eliminate the need to have any NRC or FEMA review, findings, or determinations on the adequacy of offsite agencies' emergency planning and preparedness, the NRC review of the licensees' onsite response mechanism would necessarily include aspects of some offsite elements: Communications, notification, assistance agreements with local law enforcement, fire protection, and medical organizations, and the like. Some examples, but not an exclusive list, where review of an applicant's emergency plan would involve aspects of some offsite elements may be found in pertinent portions of 10 CFR 50.47(b) (3), (5), (6), (9), and (12).

Extensive comments were received, all of which were evaluated and considered in developing the final rule.

Summary of Public Comments

The Commission received 40 letters commenting on the 46 FR 61134 proposed rule change and 66 letters commenting on the 46 FR 61132 proposed rule change. Many

letters commented on both issues within the same letter. For 46 FR 61134, 27 letters opposed the rule change while 11 letters favored the rule change. In 46 FR 61132, 43 letters opposed the rule change, while 18 letters favored the rule change. For both rule changes, commenters favoring the rule changes were typically utilities, legal firms and consulting firms representing utilities, and one State health department. Commenters opposing the rule changes included private citizens, local elected officials from New Hampshire and Suffolk County, New York, an Assistant Attorney General of Massachusetts, an Assistant Attorney General of New Hampshire, and representatives of various public groups.

All of the significant comments favoring the rule changes basically reiterated the Commission's rationale for promulgation of the proposed rule changes that was put forth in the Federal Register Notices, 46 FR 61134 and 46 FR 61132.

The following major issues against changing the regulations were raised in specific comments received. These major issues reflect the areas of concern of many commenters.

Issue 1: The NRC's credibility was so undermined by the handling of the TMI accident that the Commission should take pains to avoid even the *appearance* of relaxing safety standards. By relaxing the current emergency preparedness regulations, far more than the prestige of the agency or the Commissioners is at stake; indeed, it is believed that the credibility of NRC is a vital component of emergency preparedness. If another serious accident were to occur, many lives may be saved if people have enough faith in the dedication and truthfulness of the NRC. As things stand, substantial segments of the population are still alienated and cynical in their feelings about the agency to interfere seriously with the workability of any plans for managing an emergency.

Commission Response: When the Commission published the upgraded emergency preparedness regulations in August 1980, the subject of low power operating licenses was not addressed. At the time the Commission did not differentiate as to what emergency planning requirements would be applicable to the period of fuel loading and low power testing. The Commission has now focused on the risks associated with this level of operation and has chosen a level of emergency preparedness appropriate to assure the health and safety of the public at the stage. In doing so, the Commission does not alter the high standards applicable to the review of emergency preparedness at full power.

Issue 2: During low power testing there are higher risks due to unfamiliarity of the plant operators with their particular plant and due to undiscovered design and construction defects.

Commission Response: The Commission agrees that there may be slightly higher risks due to the plant operators having less experience with the plant at this stage and with a potential for undiscovered design and construction defects. However, in the Commission's view, this risk is significantly outweighed by several other factors. First, the fission product inventory during low power testing is much less than during higher power operation due to the low level of reactor power and short period of operation. Second, at low power there is a significant reduction in the required capacity of systems designed to mitigate the consequences of accidents compared to the required capacities under full-power operation. Third, the time available for taking actions to identify accident causes and mitigate accident consequences is much longer than at full power. This means the operators should have sufficient time to prevent a radioactive release from occurring. In the worst case, the additional time available (at least 10 hours), even for a postulated low likelihood sequence which could even-

tually result in release of the fission products accumulated at low power into the containment, would allow adequate precautionary actions to be taken to protect the public near the site. Weighing all risks involved, the Commission has determined that the degree of emergency preparedness necessary to provide adequate protection of the public health and safety is significantly less than that required for full-power operation.[1]

Issue 3: The rule changes would eliminate public participation in the review and assessment of exercises before a licensing board.

Commission Response: While it is true that the rule changes will have the likely effect of limiting litigation of the success of exercises in licensing hearings, it is the Commission's view that such assessments are not necessary to make the kind of predictive findings on emergency planning called for by the regulations prior to license issuance. The substantive emergency planning issues now being litigated in license hearings are largely focused on the 16 planning standards found in 10 CFR 50.47(b). These planning standards are unchanged by the rule changes and do not, in themselves, require a successful exercise. Thus the Commission does not regard the exclusion of the exercise generally from the Licensing Board process as affecting in any fundamental way the manner of public participation on prelicensing emergency planning issues. Finally, the rule changes do not preclude public observation of and participation in the exercises

---

[1] The level of risk associated with low-power operation has been estimated by the staff in several recent operating license cases: Diablo Canyon, Docket Nos. 275-OL, 323-OL, San Onofre, Docket Nos. 361-OL, 362-OL, and LaSalle, Docket Nos. 373-OL, 374-OL. In each case the Safety Evaluation Report concluded that low-power risk is several orders of magnitude less than full-power risk. These findings support the general conclusion in the text that a number of factors associated with low-power operation imply greatly reduced risk compare with full power.

themselves (to the extent consistent with the rules and policies of the Commission and the objectives of the exercise) and in the review and assessment critique meetings held after the exercise. The rule changes clarify that the emergency preparedness exercises are not required for a Licensing Board, Appeal Board, or Commission licensing decision. Exercises will still be required before actual power above 5% and commercial operation. The conduct of full-scale exercises early enough in the licensing process to permit the outcome of the exercises to be fully litigated at the hearing is premature. Such exercises are best held at a later time, when the operating and management staff of the plant—who are central figures in an exercise—are in place and trained in emergency functions. The Commission believes that, while the actual exercise is not an issue in a hearing under these rules (except to the extent that an outline for the exercise may be involved), the exercise will be held before full power and all significant deficiencies will be properly addressed.

Issue 4: These rule changes would undermine public confidence in the adequacy of emergency planning, safe operation of the plant, and the licensing process.

Commission Response: As the Commission noted in the Federal Register notice which announced the upgraded emergency planning regulations on August 19, 1980 (45 FR 55403) that "The [TMI] accident also showed clearly that onsite conditions and actions, even if they do not cause significant offsite radiological consequences, will affect the way the various State and local entities react to protect the public from any dangers associated with the accident. In order to discharge effectively its statutory responsibilities, the Commission must know that proper means and procedures will be in place to assess the course of an accident and its potential severity, that NRC and other appropriate authorities and the public will be notified promptly, and that adequate protective

actions in response to actual or anticipated conditions can and will be taken."

Given that no change is envisioned in the caliber of reviews for full-power licenses, and indeed, more resources in theory would be available, the Commission believes that the final rule changes announced herein do not change this responsibility or diminish in any respect the protection of the public health and safety. While the Commission understands the feelings expressed by these commenters, the Commission wants to state its continued commitent to the adequacy of emergency planning, safe operation of the plant, and in an efficient licensing process. These rule changes should not be cause for concern about this commitment.

Issue 5: Unlike some of the more technical issues, emergency planning is a subject upon which the average citizen is knowledgeable and can make a valuable contribution to the licensing proceedings. This is an important opportunity for public participation. Eliminating this consideration from licensing decisions in effect removes this vital experimental evidence from public scrutiny.

Commission Response: The proposed rule does not eliminate any important substantive aspect of emergency planning from the operating license hearings. Whether an applicant satisfies the requirements of 50.47(a) and 50.47(b) is still an issue that may be raised and litigated in those hearings. In cases where such issues are raised, applicants' and State and local jurisdictions' emergency plans should be available for examination in the hearing process prior to the issuance of an operating license. In addition, an outline of an exercise should also be available in order to assure that the requirement for the conduct of exercises (10 CFR Part 50, Appendix E, Section IV) can or will be met. Moreover, if the actual conduct of an exercise should identify fundamental defects in the way

that the emergency plan is conceived such that it calls into question whether the requirements of 10 CFR 50.47 can or will be met, a party to a license proceeding may seek to reopen a concluded hearing or file a petition for action pursuant to 10 CFR 2.206 as appropriate. This is distinct from deficiencies identified by an exercise which only reflect the actual state of emergency preparedness on a particular day in question but which do not represent some basic flaw in emergency planning. Finally, it should be recalled that the full-scale exercises themselves involve participation by local and State governments. Both the NRC and FEMA attempt to make sure that all local and regional concerns expressed by representatives of these governments are fully addressed, and that any deficiencies brought to light are remedied before a full-power license is issued. The underlying feelings expressed by these comments, however, are addressed in the Commission Responses to Issues 3 and 4.

Issue 6: The public knowledge that no offsite protection exists could cause chaos in the event of an incident during fuel loading or low power testing.

Commission Response: Prior to issuing an operating license authorizing low-power testing and fuel loading, the NRC will review the following offsite elements of the applicant's emergency plan:

(a) Section 50.47(b)(3). Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.

(b) Section 50.47(b)(5). Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the pub-

lic has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

(c) Section 50.47(b)(6). Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

(d) Section 50.47(b)(8). Adequate emergency facilities and equipment to support the emergency response are provided and maintained.[2]

(e) Section 50.47(b)(9). Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

(f) Section 50.47(b)(12). Arrangements are made for medical services for contaminated injured individuals.

(g) Section 50.47(b)(15). Radiological emergency response training is provided to those who may be called on to assist in an emergency.[2]

Knowing that the above elements of the applicants emergency plan have been reviewed by NRC should assure the public that, for low-power testing and fuel loading, adequate protective measures could and would be taken in the event of an accident.

Issue 7: The rule changes are fundamentally not in the best interest of the public health and safety but obviously in the interest of the utilities.

Commission Response: As explained in previous Responses, the Commission is convinced that the rule changes will not compromise the health and safety of the public. The Commission considers that the rule changes provide flexibility in its licensing procedures, thereby meeting its obligation to the public to conduct its busi-

---

[2] Added in response to public comment.

ness in a timely and efficient manner. This obligation includes the establishment of an efficient licensing process, while not adversely affecting the public health and safety.

Issue 8: The proposed rule changes contradict previous TMI policy statements.

Commission Response: In developing the upgraded emergency preparedness regulations (45 FR 55402 dated August 19, 1980) one of the policy statements that the Commission made was "that onsite and offsite emergency preparedness as well as proper siting and engineered design features are needed to protect the health and safety of the public [and] as the Commission reacted to the accident at Three Mile Island, it became clear that the protection provided by siting and engineered design features must be bolstered by the ability to take protective measures during the course of an accident."

This rulemaking will in no way deviate from previous policy statements but in fact will add flexibility and efficiency to the licensing process.

Issue 9: Include § 50.47(b)8 and § 50.47(b)15 in evaluating the coordination of offsite and onsite emergency preparedness. These elements require that:

(a)(8) Adequate emergency facilities and equipment to support the emergency response are provided and maintained, and

(b)(15) Radiological emergency response training is provided to those who may be called on to assist in an emergency.

Commission Response: The Commission agrees with this comment. See Commission Response to Issue #6.

Issue 10: The rule changes effectively exclude the public from the decisionmaking process on a matter of primary public concern, and create apprehension in the public mind as to whether "preparedness" will be a reality

even after a full-scale exercise before operation above 5% of rated power. The public is unlikely to be granted a special hearing, before full-power operation is granted a utility, in order to assess the actual state of preparedness.

Commission Response: It is true that special hearings will not, in a typical case, be held following the full-scale exercise. The public should recognize that the Commission does not intend to authorize the issuance of a full-power operating license if there has been a full-scale exercise which raises serious and significant deficiencies which have not been compensated for and which go to the fundamental nature of the emergency plan itself. Such a deficiency calls into question whether reasonable assurance may be found that public health and safety will be adequately protected in a radiological emergency. However, some deficiencies may be found that only reflect the actual state of preparedness which may be easily remedied; these types of deficiencies should not delay licensing action. See 10 CFR 50.47(c).

Issue 11: No rationale sustains the requirement of offsite emergency preparedness for small research reactors possessing a fission product inventory equivalent to that generated up to 5% by a large reactor while eliminating offsite emergency preparedness for the large reactor.

Commission Response: Although research reactors present an inherently smaller risk than power reactors, they do not possess the accident mitigation features (e.g., large containments) required for power reactors. In addition, research reactors are often located in high population density areas. It is therefore prudent to have an offsite emergency plan for these reactors.

Summary: The Commission has evaluated all public comments, and has also fully considered the risks of operating a nuclear power reactor at low power. The risks of operating a power reactor at low power are significantly

lower than the risks of operating at full power because: first, the fission product inventory during low power testing is much less than during higher power operation due to the low level of reactor power and short period of operation; second, at low power there is a significant reduction in the required capacity of systems designed to mitigate the consequences of accidents compared to the required capacities under full-power operation; and third, the time available for taking actions to identify accident causes and mitigate accident consequences is much longer than at full power. This means the operators should have sufficient time to prevent a radioactive release from occurring. In the worst case, the additional time available (at least 10 hours), even for a postulated low likelihood sequence which eventually results in release of the fission products accumulated at low power into the containment, would allow adequate precautionary actions to be taken to protect the public near the site. On balance, the Commission has concluded that the rule changes are technically justifiable and will enhance the efficiency of the licensing process, without adversely affecting the public health and safety and therefore should be promulgated.

Commissioner Gilinsky's Separate Opinion

I disapprove both parts of the proposed amendment.

One part of the rule provides that no NRC or FEMA findings whatsoever concerning the state or adequacy of offsite emergency preparedness shall be necessary prior to issuance of a low power license. As I stated in my disapproval of the proposed rule, there should be some offsite preparedness, especially if there is to be an extended period of low power operation. Moreover, emergency preparedness for full power should not be a hurried, last-minute affair. Some of the steps required for full-power should already be in place at the low power stage.

The other part of the rule excludes consideration of emergency exercises in an operating license proceeding, thereby eliminating an opportunity for public participation in this phase of decisionmaking. The exercises never completely follow the plan. And this area happens to be one in which the nuclear plant's neighbors have special competence, greater in some respects than that of NRC or FEMA. Their comments can be particularly useful. These need not be presented in formal hearings but we should have some means to receive and consider them. I would have modified the final rule to provide for such a brief coment period before NRC issuance of an operating license.

I would also note that the Simpson Report shows that FEMA findings will cause delays in only 2 plants: Shoreham and Byron 1. These delays are based on the applicants' construction dates. If NRC estimates are used, this amendment would have no effect on the dates for issuing operating licenses.

Commissioner Ahearne's Additional Views

In response to Commissioner Gilinsky's comment that "the rule provides that no NRC of FEMA findings whatsoever concerning the state or adequacy of offsite emergency preparedness shall be necessary prior to issuance of a low power license," I would note "the NRC review of the licensees' onsite response mechanism would necessarily include aspects of some offsite elements: communications, notification, assistance agreements with local law enforcement, fire protection, and medical organizations, and the like" (Statement of considerations for this rule at 2).

With respect to his other point concerning consideration in the operating license proceeding, (1) it is important to hold the exercise close to completion of the plant since the operating personnel will then be on site and be able to learn from the experience, and the exer-

cise will be more realistic since hardware and procedures will be closer to completion; and (2) there are public meetings after each drill and the state, local government and other emergency people do participate in these meetings and do provide comments and criticism.

National Environmental Policy Act Consideration

Pursuant to 10 CFR 51.5(d)(3) of the Commission's regulations, an environmental impact appraisal need not be prepared in connection with the subject final amendment because there is no substantive or significant environmental impact.

Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission hereby certifies that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. The proposed rule changes concern a clarification of the elements and findings necessary for the issuance of an operating license for nuclear power plants licensed pursuant to Section 103 and 104b of the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2133, 2134b. The electric utility companies owning and operating these nuclear power plants are dominant in their service areas, and do not fall within the definition of a small business found in Section 3 of the Small Business Act, 15 U.S.C. 632, or within the Small Business Size Standards set forth in 13 CFR Part 121. Accordingly, there is no significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act of 1980.

Paperwork Reduction Act Statement

Pursuant to the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96-511), the NRC has made a preliminary determination that these rule changes do not

impose new recordkeeping, information collection, or reporting requirements.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and section 552 and 553 of title 5 of the United States Code, notice is hereby given that the following amendments to Title 10, Chapter I, Code of Federal Regulations, Part 50 is published as a document subject to codification. These rules are made immediately effective because restrictions on applicants are being relieved.

List of Subjects in 10 CFR Part 50

Antitrust, Classified information, Fire prevention, Intergovernmental relations, Nuclear power plants and reactors, Penalty, Radiation protection, Reactor siting criteria, and Reporting requirements.

PART 50—DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

1. The authority citation for Part 50 reads as follows:

Authority: Secs. 103, 104, 161, 182, 183, 189, 68 Stat. 936, 937, 948, 953, 954, 955, 956, as amended (42 U.S.C. 2133, 2134, 2201, 2232, 2233, 2239); secs. 201, 202, 206, 88 Stat. 1243, 1244, 1246 (42 U.S.C. 5841, 5842, 5846), unless otherwise noted. Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80-50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Sections 50.100-50.102 issued under sec. 186, 68 Stat. 955 (42 U.S.C. 2236). For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273), § 50.54(i) issued under sec. 161i, 68 Stat. 949 (42 U.S.C. 2201(i)), §§ 50.70, 50.71, and 50.78 issued under sec. 1610, 68 Stat. 950, as amended; (42 U.S.C. 2201(o)), and the laws referred to in Appendices.

2. In § 50.47, paragraph (a) is revised, the introductory text to paragraph (b) is revised, paragraph (c)(1)

is revised, and a new paragraph (d) is added. All revisions to read as follows:

§ 50.47 Emergency plans.

(a)(1) Except as provided in paragraph (d) of this section, no operating license for a nuclear power reactor will be issued unless a finding is made by NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

(2) The NRC will base its finding on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented, and on the NRC assessment as to whether the applicant's onsite emergency plans are adequate and whether there is reasonable assurance that they can be implemented. A FEMA finding will primarily be based on a review of the plans. Any other information already available to FEMA may be considered in assessing whether there is reasonable assurance that the plans can be implemented. In any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability. Emergency preparedness exercises (required by paragraph (b)(14) of this section and Appendix E, Section F of this part) are part of the operational inspection process and are not required for any initial licensing decision.

(b) The onsite and, except as provided in paragraph (d) of this section, offsite emergency response plans for nuclear power reactors must meet the following standards:

* * * *

(c)(1) Failure to meet the applicable standards set forth in paragraph (b) of this section may result in the

Commission declining to issue an operating license; however, the applicant will have an opportunity to demonstrate to the satisfaction of the Commission that deficiencies in the plans are not significant for the plant in question, that adequate interim compensating actions have been or will be taken promptly, or that there are other compelling reasons to permit plant operation.

* * * *

(d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and capability to implement State and local offsite emergency plans are required prior to issuance of an operating license authorizing only fuel loading and/or low power operations (up to 5% of the rated power). Insofar as emergency planning and preparedness requirements are concerned, a license authorizing fuel loading and/or low power operation may be issued after a finding is made by the NRC that the state of onsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base this finding on its assessment of the applicant's emergency plans against the pertinent standards in paragraph (b) of this section and Appendix E of this Part.

3. Section 50.54(q) is revised to read as follows:

§ 50.54 Conditions of licenses.

* * * *

(q) A licensee authorized to possess and/or operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the applicable standards in § 50.47(b) and the applicable requirements in Appendix E to this part. A licensee authorized to possess and/or operate a research reactor or a fuel facility shall follow

and maintain in effect emergency plans which meet the requirements in Appendix E to this part. The nuclear power reactor licensee may make changes to these plans without Commission approval only if such changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the applicable standards of § 50.47(b) and the applicable requirements of Appendix E to this part. The research reactor licensee and/or the fuel facility licensee may make changes to these plans without Commission approval only if such changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the requirements of Appendix E to this part. Proposed changes that decrease the effectiveness of the approved emergency plans shall not be implemented without application to and approval by the Commission. The licensee shall furnish 3 copies of each proposed change for approval; and/or if a change is made without prior approval, 3 copies shall be submitted within 30 days after the change is made or proposed to the Administrator of the appropriate NRC regional office specified in Appendix D, 10 CFR Part 20, with 10 copies to the Director of Nuclear Reactor Regulation, or, if appropriate, the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

* * * *

Appendix E [Amended]

4. Section I of Appendix E to 10 CFR Part 50 is revised to read as follows [footnotes unchanged]:

I. Introduction

Each applicant for a construction permit is required by § 50.34(a) to include in the preliminary safety analysis report a discussion of preliminary plans for coping with emergencies. Each applicant for an operating license is required by § 50.34(b) to include in the final safety analysis report plans for coping with emergencies.

This appendix establishes minimum requirements for emergency plans for use in attaining an acceptable state of emergency preparedness. These plans shall be described generally in the preliminary safety analysis report and submitted as part of the final safety analysis report.

The potential radiological hazards to the public associated with the operation of research and test reactors and fuel facilities licensed under 10 CFR Parts 50 and 70 involve considerations different than those associated with nuclear power reactors. Consequently, the size of Emergency Planning Zones[2] (EPZs) for facilities other than power reactors and the degree to which compliance with the requirements of this section and sections II, III, IV, and V as necessary will be determined on a case-by-case basis.[3]

Notwithstanding the above paragraphs, in the case of an operating license authorizing only fuel loading and/or low power operations up to 5% of rated power, no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and the capability to implement State and local offsite emergency plans, as defined in this Appendix, are required prior to the issuance of such a license.

5. Section F of Appendix E to 10 CFR Part 50, item (b) is revised to read as follows:

F. Training.

* * * *

b. For each site at which a power reactor is located for which the first operating license for that site is issued after July 13, 1982, within one year before issuance of the first operating license for full power, and prior to operation above 5% of rated power of the first reactor, which will enable each State and local govern-

ment within the plume exposure pathway EPZ and each State within the ingestion pathway EPZ to participate.

* * * *

Dated at Washington, D.C. this 8th day of July, 1982.

For the Nuclear Regulatory Commission.

Samual J. Chilk,

Secretary of the Commission.

APPENDIX E

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

[Docket No. PRM-50-35]

Union of Concerned Scientists; Petition for Rulemaking

Agency: Nuclear Regulatory Commission.

ACTION: Denial of Petition for Rulemaking.

SUMMARY: The Nuclear Regulatory Commission is denying a petition for rulemaking which requested that the Commission amend its emergency planning rules for nuclear power plants so that the results of the offsite emergency preparedness exercise held prior to full-power operation would be litigable in the operating license proceeding. The Commission is denying the petition because the requested amendment is unnecessary, contrary to sound administrative practice, and would add regulatory delays to the Commission's licensing process without a corresponding increase in public health and safety.

FOR FURTHER INFORMATION CONTACT: William M. Shields, Office of the Executive Legal Director, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Phone: 301-492-8693.

SUPPLEMENTARY INFORMATION:

I. Background

On November 18, 1982, the Commission published in the Federal Register (47 FR 51889) a notice announcing the receipt of a petition for rulemaking filed by the Union of Concerned Scientists (UCS). The Commission indicated that the principal thrust of the petition was to ensure, via amendment of the Commission's emergency planning regulations in 10 CFR 50.47, that the results of the pre-operational offsite emergency preparedness ex-

ercise could be litigated in the full-power operating license proceeding.

The UCS petition seeks to reverse the effect of an amendment to 10 CFR 50.47 promulgated by the Commission on July 13, 1982 (47 FR 30232; notice of proposed rulemaking published December 15, 1981, 46 FR 61134). That amendment, in relevant part, added a sentence to 10 CFR 50.47(a)(2) which reads as follows:

Emergency preparedness exercises (required by paragraph (b)(14) of this section and Appendix E, Section F of this part) are part of the operational inspection process and are not required for any initial licensing decision.

The effect of this amendment was to make clear that the record in the full-power proceeding could be closed, and a licensing decision rendered, prior to the offsite emergency preparedness exercise. This exercise, however, had to be held prior to authority for full-power operation for the facility as had always been the case.

Presently pending before the Court of Appeals for the District of Columbia Circuit is UCS' direct challenge to the 1982 amendments, filed September 10, 1982. (*Union of Concerned Scientists v. NRC*, Docket No. 82-2053). The Commonwealth of Massachusetts has moved to intervene in this action, and also filed comments on the petition for rulemaking. Briefing in this case has been held in abeyance so that administrative action on the petition for rulemaking could be completed. A main concern of UCS was the NRC, by its July 1982 amendments, intended to alter the way emergency planning issues are litigated generally in license proceedings. At a meeting held November 3, 1982, between NRC and UCS representatives, NRC stated that, except for the exercise issue, the NRC did not intend this rule change to affect the way full-power proceedings were conducted. It was generally agreed that the principal thrust of the petition

concerned the litigation of "effects in on-site and off-site emergency planning identified as a result of pre-operational emergency preparedness exercises." 47 FR 51889. The petition notice therefore highlighted this issue in seeking public comment.

II. Public Comments

A. Description of Comments Received on Petition

Seventy-eight comments were received on the UCS petition, representing a wide variety of opinions and sources. By source, the comments break down as follows: public interest groups—22, industry—19, States—3, Federal agencies—2, counties—1, universities—1, attorneys (other than those representing clients)—2, private citizens—28 (representing 93 persons). These comments in many cases focus on the same issues presented in the earlier rulemaking on the same subject, where 40 comments were received. In all, then, the Commission has received and considered 118 comments on the UCS petition.

In view of the large number of comments, pro and con, it is not feasible to respond to each individually. Instead the analysis below will be organized by issue. The factors cited by commenters in favor of the UCS petition will be stated, each followed by a statement of the Commission's position. Because the Commission is denying the petition, it is not necessary for the Commission to respond to each of the arguments offered by commenters opposing the petition. Some of their arguments have been incorporated into the Commission's responses below.

All public comments—for this proceeding and for the previous rulemaking—are available for public inspection in the Commission's Public Document Room, 1717 H Street N.W., Washington, D.C.

B. Response to Public Comments

Issue 1: Emergency planning exercises should be subject to hearings before a license is issued because the exercise is a vital indicator of the actual state of emergency preparedness.

Commission response: The commission agrees that the full-scale offsite exercise is one important indicator of the actual state of emergency preparedness. For this reason, the Commission continues to require that the exercise be conducted, and significant deficiencies corrected or mitigated, before full-power operation is authorized for the facility.

From this it does not follow, however, that any benefit is to be gained from delaying the operating license hearing, as a matter of course, to incorporate the results of this exercise in the full-power operating license proceeding. As to all matters of public health and safety, the licensing boards' findings are predictive in that they often are based upon the design of the facility, the qualifications of the utility's management and operational staff, inspections, performance specification, etc., rather than demonstrated performance. At the time the licensing board issues its decision authorizing a full-power license, many major plant systems have not been fully tested at or near the full-power operating levels necessary to show full-system performance. The full-scale exercise is analogous to the evaluation of plant systems at operating power levels during power ascension testing. Where problems are discovered, they are addressed before full commercial operation is achieved. On the other hand, the applicant's emergency plan is akin to the design of the facility. The task of the licensing board confronted with contested emergency planning and preparedness issues is to decide whether the plan meets the Commission's regulations as set out in 10 CFR 50.47 and Appendix E to Part 50 and to predict whether it can

be implemented successfully. *See 47 FR at 30235.* As was stated above, both decisions are fully litigable before the board. This would include litigation of the planning process itself (i.e. the various technical and other judgments of the planners and the reviewers that underlie the plan itself and the predictions of implementation capability). The board may require changes or additions to the plan based upon the testimony presented. The 1982 amendment here challenged by UCS was only intended to affect the way in which emergency planning issues are litigated by clarifying that the results of the exercise need not be litigated.

The full-scale offsite exercise is actually an indicator of two factors: the state of emergency preparedness at the time the exercise is conducted, and whether the emergency plan and the planning process are fundamentally sound. If the outcome of the exercise showed that the plan and the underlying judgments about its adequacy and capability of implementation were seriously flawed—as opposed to details of its implementation in that exercise not reflecting on the overall adequacy of the plan and its capability of implementation—reopening of the hearing record might be appropriate, coupled, of course, with delay of the full-power authorization. This matter was fully explained in the rulemaking notices for the amendment.

There are sound policy reasons for removing the full-scale exercise from the operating license proceeding. While these reasons were stated by the Commission in the previous rulemaking, they will be restated here for clarity. Contrary to the view of many comments supporting the UCS petition, the action was not taken merely to further limit the scope of the operating license proceeding. The Commission acknowledges that the public can play an important part in offsite emergency planning by participating in the operating license proceeding. This will continue to be the case. The Commission also

believes that it is important, however, that the full-scale exercise be held as close in time as possible to commercial operation of the facility. This is necessary so that the licensee personnel who will be responsible for the commercial operation of the facility will be present at the site, familiar with the plant and its environs, and trained to carry out the emergency plan. As one moves back in time from commercial operation, these personnel will not, for the most part, be present. In addition, certain instrumentation to be relied on in emergencies may not be fully operational or calibrated. The safety of the plant would be better served by an exercise utilizing those licensee personnel who would have to carry out emergency procedures once the plant is licensed for commercial operation.

This being the case, it is clearly impractical to hold the full-power proceeding record open solely for the purpose of litigating the results of the full-scale offsite exercise held at a time close to commercial operation. Even with the use of expedited procedures, months could be consumed while the results of the exercise are analyzed, testimony prepared, hearings held, findings made, and so on. This delay would occur without a commensurate safety benefit in the ordinary case. It is important, of course, to correct or resolve problems which are discovered as a result of the exercise. In most cases, this can be done prior to full power authorization. If the exercise shows serious problems that must be remedied, the Commission can delay full-power authorization until such problems are rectified. To the extent there are material facts in dispute, litigants in NRC proceedings would likely be heard on the impact of such serious defects on the NRC's ability to decide there is reasonable assurance that the plant could operate safely. As the Commission has stated on prior occasions, no facility will be permitted to achieve commercial power levels when there is doubt that the public health and safety will be protected in the event of an accident.

Moreover, deficiencies in the full-scale offsite exercise would not be suitable subjects for the adjudicatory setting. As was explained above, the function of the licensing board is to determine whether the emergency planning efforts reflected in the plan and its underlying basis and review meet the Commission's regulations. If some detail of a plan, *e.g.*, a hard telephone link to a State emergency office, does not operate properly during the exercise, the appropriate course of action is to remedy the problem by concrete action, not hold a hearing and hear the testimony of experts on why the system failed on the day in question. If it should occur, however, that some key aspect of the plan turns out to be inadequate or unworkable, or the judgments reflected in the planning process are untenable, or major revisions will be necessary, the hearing could be reconvened upon a showing that the Commission's standards for reopening have been met. This could be done, however, only where it is questionable that the Commission's regulations have been met. Where appropriate, any person may request that the Commission institute a proceeding to take immediate licensing action under 10 CFR 2.206. Such action could include, in extraordinary circumstances, suspension of the license pending correction of the deficiency.

Issue 2: Emergency planning issues generally will be removed from licensing adjudications under the current rule.

Commission Response: The Commission responded in depth to this contention in the notice of final rulemaking published July 13, 1982 (47 FR at 30233). The applicant for an operating license is required by 10 CFR 50.47 to submit a complete emergency plan for the facility. All aspects of the planning process may be litigated in the operating license proceeding. For example, one can assert that the planning standards in 10 CFR 50.47(b) have not been met. In the Commission's view, this does not constitute removal of emergency planning from the licensing process.

As was explained above, and to be very clear, the only aspect of emergency planning removed from the proceeding is the full-scale offsite exercise. This was done for reasons which will be explained in the response to the next issue. (See also the notices of proposed and final rulemaking in this proceeding.)

Issue 3: The public has no recourse to challenge decisions made following the exercise if the hearing record is already closed.

Commission Response: The only aspect of the Commission's procedures which was altered by the 1982 amendment at issue here was the inclusion, as a matter of course, of the results of the full-scale offsite exercise in the full-power operating license proceeding. The rule changes did not affect public participation in any other way under NRC regulations. It is true, as UCS asserts, that the other avenues of public intervention (*e.g.*, motions to reopen a hearing, petitions under 2.206) are conditioned by the need to show that such licensing actions are warranted by the facts in each case. This is nonetheless true of any other aspect of the facility which is tested prior to, or even after, achievement of commercial power levels. The comments raise no intrinsic safety reason which distinguishes the results of the offsite exercise from the result of testing the reactor coolant system at full capacity. If, in either case, minor problems were discovered, correction is needed but actions such as a re-opening of the hearing or suspension of the license would not be warranted. Major deficiencies in an exercise would be addressed by the NRC prior to full power authorization, but in any event the public could seek to participate and would be granted the opportunity to do so in appropriate circumstances.

The Commission's objective in the 1982 amendment was to improve the conduct of exercises by placing them as close in time to commercial operation as possible, not

to eliminate public recourse in the event an exercise demonstrates serious defects in the emergency plan or planning process. The amendment was carefully limited to provide this result.

Issue 4: A utility might submit a faulty plan in the absence of public scrutiny in the hearing context, thus jeopardizing public safety.

Commission Response: The plan is addressed in the hearing process. An applicant for an operating license is required by NRC regulations (10 CFR 50.47 Appendix E) to submit an emergency plan which complies with the regulations and which conforms to other regulatory guidance supporting the regulations. The licensing board must be able to find that the existing plan and planning process do in fact, meet the regulations or whether, on the other hand, there is cause to withhold authorization of a license until suitable planning was demonstrated. Neither the petitioner nor commenters have shown in what way the Commission's action resulted in a diminution of safety in respect to emergency planning. In the Commission's view, it is not enough to assert, without more, that removal of a limited subject from the adjudicative phase of the licensing process necessarily equals a loss of protection of the public health and safety, or implies a loss of the public's right to recourse where the facts justify extraordinary licensing action.

Issue 5: The current text of 10 CFR 50.47(c) appears to allow submission of offsite plans after the record has closed. If so, this would remove such plans entirely from public scrutiny in view of the high standard which must be met to reopen a hearing.

Commission Response: This concern is the result of confusion over the work "should" in the Statement of Considerations which accompanied the 1982 amendments:

The proposed rule does not eliminate any important substantive aspect of emergency planning from the operating license hearings. Whether an applicant satisfies the requirements of 50.47(a) and 50.47(b) is still an issue that may be raised and litigated in those hearings. In cases where such issues are raised, applicants' and State and local jurisdictions' emergency plans *should* be available for examination . . . (47 FR at 30233) (emphasis added).

The use of "should" was intended to convey the possibility that a plan or a part of a plan (*e.g.*, township or county) might not be available at the hearing if that jurisdiction has, for whatever reason, not yet completed a plan. In such cases, 10 CFR 50.47(c)(1) does allow the applicant to show that, because of other compensating factors, public health and safety will be adequately protected because of other plans or evidence of preparedness. 45 FR 55402, 55403 (1980); Mt. Transcript pp. 3-12 (July 23, 1980) [Docket No. PR-50 (44 FR 75167), Vol. 9]. Where this situation occurs, intervening parties would have the opportunity to challenge the applicant's assertion. The word "should," however, should not be read to mean that the NRC now believes that plans meeting the rule's criteria need not generally be available at the hearing. In that sense, the use of "should" in the above-quoted section is overboard and could understandably lead to concern. To a certain extent, the comment reflects concern that the NRC intended to undercut adjudication of emergency planning generally. As explained in this document, that is not the Commission's intention. Furthermore, contrary to the suggestion in some comments that NRC Boards are using the July 1982 amendments in just that way, the Commission has not found a single instance where that was the case. The proffered example, the *Zimmer* proceeding, is simply inapposite because the Board never decided this issue as characterized by petitioner and commenters.

Issue 6: The 1982 amendment violates the Atomic Energy Act and the Administrative Procedure Act by denying the public the right to litigate the adequacy of offsite emergency plans.

Commission Response: This argument is based upon a flawed premise. The adequacy of offsite emergency planning and capability of implementation continues to be fully litigable in the operating license proceeding. Intervenors may challenge any aspect of this planning and its capability of implementation as not complying with applicable NRC and FEMA standards.

The Commission has the discretion to separate matters which properly belong in the licensing phase from those which belong in the post-adjudicative operational phase. If this were not true—and the petitioner and commenters do not so argue—the Commission would be obligated to hold open the hearing record until a plant had been fully tested at commercial power levels, given the real possibility that a plant system may not function as projected in the earlier stages of the safety hearing. Pre-operational testing is no less crucial to plant safety that the full-scale exercise is crucial to measuring emergency preparedness (see response to Issue 7 below). It is nonetheless clear that the record of the licensing proceeding must close on all matters at some logical point, and the Commission has judicially-recognized discretion to select that point on a rational basis. Neither UCS nor commenters supporting the UCS position have put forth convincing arguments why the full-scale offsite test of the emergency plans may not be placed in the "operational events" category. As explained above problems identified in the course of exercises will either demonstrate problems with actual preparedness (which may be corrected in a straightforward manner) or with the plan process. The examples of exercise deficiencies raised in the comments fall into the former category and are not different from other kinds

of preoperational problems. In the absence of a showing to the contrary, the argument that the Commission is forbidden by statute to permit licensing board decisions prior to the conduct of the exercise cannot be accepted.

Issue 7: The comment from FEMA emphasizes the importance of the full-scale offsite exercise in overall emergency planning and preparedness.

Commission Response: The Commission completely agrees with the comment from FEMA which states, in part:

FEMA wishes to reaffirm the importance and value of the joint exercise for FEMA's findings concerning the adequacy of offsite plans and preparedness. A full-scale joint exercise plays an important role and is necessary if FEMA is to certify in a finding that State and local governments are capable of protecting public health and safety in the event of an accident at a commercial nuclear power plant. The exercise gives FEMA observers the opportunity to assess the readiness, knowledge, and skills of State and local government personnel as they attempt to implement the actions outlined in the plan and the objectives of a scenario adopted for the exercise.

Deficiencies that are identified during an exercise provide State and Local governments and opportunity to take corrective action through additional exercising and plan modification, thus improving preparedness.

FEMA's primary concern is that completion of an adequate joint exercise continue as a requirement for a full-power nuclear power plant license. FEMA defers to NRC on whether this should be a matter for its hearing boards to deal with in their full-power proceedings.

As is clear from the discussion above and from the notices of rulemaking accompanying the 1982 amendment, no full-power operation will be authorized prior to the

full-scale joint exercise. In addition, no license will issue if the exercise demonstrates significant deficiencies:

The public should recognize that the Commission does not intend to authorize the issuance of a full-power operating license if there has been a full-scale exercise which raises serious and significant deficiencies which have not been compensated for and which go to the fundamental nature of the plan itself. (Notice of Final Rule, 47 FR at 30234).

And while it is true that the evidentiary standard to re-open a closed record is high, it is not insurmountable. An intervenor in a licensing proceeding may request that the record be reopened. If that option is unavailable, that person may request relief under 10 CFR 2.206. As FEMA suggests, the Commission should be able to make the determination whether a proceeding is necessary to examine the results of the exercise. The 1982 amendment objected to by UCS does no more than remove any doubt that the Commission may exercise this discretion on a case-by-case basis. Where the facts justify a further proceeding, one will be ordered. Where the exercise shows emergency planning to be fundamentally sound and in accord with the findings of the licensing board, further litigation as a matter of course would serve no purpose.

III. Findings

Upon a complete review of the record in this proceeding and in the rulemaking which resulted in the amendment placed in issue by UCS, the Commission finds nothing to indicate that it has erred either as a matter of law or as a matter of policy. Therefore, the Commission hereby denies PRM-50-35. As with preoperational testing of safety systems, there are sound policy reasons for conducting the exercise as near in time as possible to commercial operation of the facility. The proper func-

tion of the adjudicative proceeding is to examine the emergency planning of the applicant and offsite jurisdictions and determine whether it meets NRC and FEMA standards. The Commission sees no benefit to be gained by delaying issuance of a full-power license for litigation over a basically successful exercise. It is within the Commission's legal discretion to prevent this result while at the same time enhancing the usefulness and credibility of the exercise by allowing the record to close in the proceeding prior to conduct of the exercise.

Dated at Washington, DC, this 12th day of April, 1983.

For the Commission

Samuel J. Chilk,

Secretary of the Commission.

APPENDIX F

ATOMIC ENERGY ACT OF 1954

Section 189(a)(1), 42 U.S.C. § 2239(a)(1) (1982)

§ 2239. Hearings and judicial review

(a)(1) In any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, and in any proceeding for the payment of compensation, an award or royalties under sections 2183, 2187, 2236(c) or 2238 of this title, the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding. The Commission shall hold a hearing after thirty days' notice and publication once in the Federal Register, on each application under section 2133 or 2134(b) of this title for a construction permit for a facility, and on any application under section 2134(c) of this title for a construction permit for a testing facility. In cases where such a construction permit has been issued following the holding of such a hearing, the Commission may, in the absence of a request therefor by any person whose interest may be affected, issue an operating license or an amendment to a construction permit or an amendment to an operating license without a hearing, but upon thirty days' notice and publication once in the Federal Register of its intent to do so. The Commission may dispense with such thirty days' notice and publication with respect to any application for an amendment to a construction permit or an amendment to an operating license upon a determination by the Commission that the amendment involves no significant hazards consideration.

[Aug. 1, 1946, ch. 724, § 189, as added Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 955, and amended Sept. 2, 1957, Pub. L. 85-256, § 7, 71 Stat. 579; Aug. 29, 1962, Pub. L. 87-615, § 2, 76 Stat. 409; Jan. 4, 1983, Pub. L. 97-415, § 12(a), 96 Stat. 2073.]

APPENDIX G

RULES AND REGULATIONS OF THE NUCLEAR REGULATORY COMMISSION

10 C.F.R. §§ 50.47, 50.54(q)-(u) and Part 50, Appendix E (1984)

§ 50.47 Emergency plans.

(a)(1) Except as provided in paragraph (d) of this section, no operating license for a nuclear power reactor will be issued unless a finding is made by NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

(2) The NRC will base its finding on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented and on the NRC assessment as to whether the applicant's onsite emergency plans are adequate and whether there is reasonable assurance that they can be implemented. A FEMA finding will primarily be based on a review of the plans. Any other information already available to FEMA may be considered in assessing whether there is reasonable assurance that the plans can be implemented. In any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability. Emergency preparedness exercises (required by paragraph (b)(14) of this section and Appendix E, Section F of this part) are part of the operational inspection process and are not required for any initial licensing decision.

(b) The onsite and, except as provided in paragraph (d) of this section, offsite emergency response plans for

nuclear power reactors must meet the following standards:

(1) Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

(2) On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

(3) Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.

(4) A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

(5) Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and followup messages to response organizations and the public has been estab-

lished; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

(6) Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

(7) Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contract with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.

(8) Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

(9) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

(10) A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

(11) Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

(12) Arrangements are made for medical services for contaminated injured individuals.

(13) General plans for recovery and reentry are developed.

(14) Periodoic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

(15) Radiological emergency response training is provided to those who may be called on to assist in an emergency.

(16) Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

(c) (1) Failure to meet the applicable standards set forth in paragraph (b) of this section may result in the Commission declining to issue an operating license; however, the applicant will have an opportunity to demonstrate to the satisfaction of the Commission that deficiencies in the plans are not significant for the plant in question, that adequate interim compensating actions have been or will be taken promptly, or that there are other compelling reasons to permit plant operation.

(2) Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled

nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.

(d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and capability to implement State and local offsite emergency plans are required prior to issuance of an operating license authorizing only fuel loading and/or low power operations (up to 5% of the rated power). Insofar as emergency planning and preparedness requirements are concerned, a license authorizing fuel loading and/or low power operation may be issued after a finding is made by the NRC that the state of onsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base this finding on its assessment of the applicant's emergency plans against the pertinent standards in paragraph (b) of this section and Appendix E of this Part.

[Sec. 50.47 as added August 19, 1980, effective November 3, 1980 (45 F. R. 55402); amended effective July 13, 1982 (47 F. R. 30232); officially corrected September 15, 1982 (47 F. R. 40536); amended July 6, 1984, effective August 6, 1984 (49 F. R. 27733).]

§ 50.54 Conditions of licenses.

Whether stated therein or not, the following shall be deemed conditions in every license issued:

* * * *

(q) A licensee authorized to possess and/or operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in § 50.47(b) of this part and the requirements in Appendix E to this

Part. A licensee authorized to possess and/or operate a research reactor or a fuel facility shall follow and maintain in effect emergency plans which meet the requirements in Appendix E of this part. The nuclear power reactor licensee may make changes to these plans without Commission approval only if such changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of § 50.47(b) of this part and the requirements of Appendix E of this Part. The research reactor licensee and/or the fuel facility licensee may make changes to these plans without Commission approval only if such changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the requirements of Appendix E of this part. Proposed changes that decrease the effectiveness of the approved emergency plans shall not be implemented without application to and approval by the Commission. The licensee shall furnish one copy of each proposed change for approval to the Administrator of the appropriate NRC Regional Office specified in Appendix D of Part 20 of this chapter and two copies to the Document Control Desk, U. S. Nuclear Regulatory Commission, Washington, DC 20555. If a change is made without approval, the licensee shall furnish one copy to the Administrator of the appropriate NRC Regional Office specified in Appendix D of Part 20 of this chapter and two copies to the Document Control Desk, U. S. Nuclear Regulatory Commission, Washington, DC 20555 within 30 days after the change is made.

(r) Each licensee who is authorized to possess and/or operate a research or test reactor facility with an authorized power level greater than or equal to 2 MW thermal, under a license of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of the Office of Nuclear Reactor Regulation for approval by September 7, 1982. Each licensee who is authorized to possess and/or oper-

ate a research or test reactor facility with an authorized power level less than 2 MW thermal, under a license of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of the Office of Nuclear Reactor Regulation for approval by November 3, 1982.

(s)(1) Each licensee who is authorized to possess and/or operate a nuclear power reactor shall submit to NRC within 60 days of the effective date of this amendment the radiological emergency response plans of State and local government entities in the United States that are wholly or partially within a plume exposure pathway EPZ, as well as the plans of State governments wholly or partially within an ingestion pathway EPZ.[1, 2] Ten (10) copies of the above plans shall be forwarded to the Director of Nuclear Reactor Regulation with 3 copies to the Director of the appropriate NRC regional office. Generally, the plume exposure pathway EPZ for nuclear power reactors shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs for a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear

---

[1] Emergency Planning Zones (EPZs) are discussed in NUREG-0396; EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," December 1978.

[2] If the State and local emergency response plans have been previously provided to the NRC for inclusion in the facility docket, the applicant need only provide the appropriate reference to meet this requirement.

reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway EPZ shall focus on such actions as are appropriate to protect the food ingestion pathway.

(2) (i) For operating power reactors, the licensee, State, and local emergency response plans shall be implemented by April 1, 1981, except as provided in Section IV.D.3 of Appendix E to this part.

(ii) If after April 1, 1981, the NRC finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency (including findings based on requirements of Appendix E, Section IV.D.3) and if the deficiencies (including deficiencies based on requirements of Appendix E, Section IV.D.3) are not corrected within four months of that finding, the Commission will determine whether the reactor shall be shut down until such deficiencies are remedied or whether other enforcement action is appropriate. In determining whether a shutdown or other enforcement action is appropriate, the Commission shall take into account, among other factors, whether the licensee can demonstrate to the Commission's satisfaction that the deficiencies in the plan are not significant for the plant in question, or that adequate interim compensating actions have been or will be taken promptly, or that there are other compelling reasons for continued operation.

(3) The NRC will base its finding on a review of the FEMA findings and determinations as to whether state and local emergency plans are adequate and capable of being implemented, and on the NRC assessment as to whether the licensee's emergency plans are adequate and capable of being implemented. Nothing in this paragraph shall be construed as limiting the authority of the Commission to take action under any other regulation or authority of the Commission or at any time other than that specified in this paragraph.

(t) A nuclear power reactor licensee shall provide for the development, revision, implementation, and maintenance of its emergency preparedness program. To this end, the licensee shall provide for a review of its emergency preparedness program at least every 12 months by persons who have no direct responsibility for implementation of the emergency preparedness program. The review shall include an evaluation for adequacy of interfaces with State and local governments and of licensee drills, exercises, capabilities, and procedures. The results of the review, along with recommendations for improvements, shall be documented, reported to the licensee's corporate and plant management, and retained for a period of five years. The part of the review involving the evaluation for adequacy of interface with State and local governments shall be available to the appropriate State and local governments.

(u) Within 60 days after the effective date of this amendment, each nuclear power reactor licensee shall submit to the NRC plans for coping with emergencies that meet standards in § 50.47(b) and the requirements of Appendix E of this Part.

APPENDIX E—EMERGENCY PLANNING AND PREPAREDNESS FOR PRODUCTION AND UTILIZATION FACILITIES

Table of Contents

I. Introduction

II. The Preliminary Safety Analysis Report

III. The Final Safety Analysis Report

IV. Content of Emergency Plans

V. Implementing Procedures

I. Introduction

Each applicant for a construction permit is required by § 50.34(a) to include in the preliminary safety analysis report a discussion of preliminary plans for coping with emergencies. Each applicant for an operating license is required by § 50.34(b) to include in the final safety analysis report plans for coping with emergencies.

This appendix establishes minimum requirements for emergency plans for use in attaining an acceptable state of emergency preparedness. These plans shall be described generally in the preliminary safety analysis report and submitted as a part of the final safety analysis report.

The potential radiological hazards to the public associated with the operation of research and test reactors and fuel facilities licensed under 10 CFR Parts 50 and 70 involve considerations different than those associated with nuclear power reactors. Consequently, the size of Emergency Planning Zones[1] (EPZs) for facilities other

[1] EPZs for power reactors are dicsussed in NUREG-0396; EPA 520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," December 1978. The

than power reactors and the degree to which compliance with the requirements of this Section and Sections II, III, IV, and V as necessary will be determined on a case-by-case basis.[2]

Notwithstanding the above paragraphs, in the case of an operating license authorizing fuel loading and/or low power operations up to 5% of rated power no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and the capability to implement State and local offsite emergency plans, as defined in this Appendix, are required prior to the issuance of such a license.

II. The Preliminary Safety Analysis Report

The Preliminary Safety Analysis Report shall contain sufficient information to ensure the compatibility of proposed emergency plans for both onsite areas and the EPZs, with facility design features, site layout, and site location with respect to such considerations as access routes, surrounding population distributions, land use, and local jurisdictional boundaries for the EPZs in the case of nuclear power reactors as well as the means by which the standards of § 50.47(b) will be met.

---

size of the EPZs for a nuclear power plant shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MW thermal. Generally, the plume exposure pathway EPZ for nuclear power plants with an authorized power level greater than 250 MW thermal shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius.

[2] Regulatory Guide 2.6 will be used as guidance for the acceptability of research and test reactor emergency response plans.

As a minimum, the following items shall be described:

A. Onsite and offsite organizations for coping with emergencies and the means for notification, in the event of an emergency, of persons assigned to the emergency organizations.

B. Contacts and arrangements made and documented with local, State, and Federal governmental agencies with responsibility for coping with emergencies, including identification of the principal agencies.

C. Protective measures to be taken within the site boundary and within each EPZ to protect health and safety in the event of an accident; procedures by which these measures are to be carried out (e.g., in the case of an evacuation, who authorizes the evacuation, how the public is to be notified and instructed, how the evacuation is to be carried out); and the expected response of offsite agencies in the event of an emergency.

D. Features of the facility to be provided for onsite emergency first aid and decontamination and for emergency transportation of onsite individuals to offsite treatment facilities.

E. Provisions to be made for emergency treatment at offsite facilities of individuals injured as a result of licensed activities.

F. Provisions for a training program for employees of the licensee, including those who are assigned specific authority and responsibility in the event of an emergency, and for other persons who are not employees of the licensee but whose assistance may be needed in the event of a radiological emergency.

G. A preliminary analysis that projects the time and means to be employed in the notification of State and local governments and the public in the event of an emergency. A nuclear power plant applicant shall perform

a preliminary analysis of the time required to evacuate various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations, noting major impediments to the evacuation or taking of protective actions.

H. A preliminary analysis reflecting the need to include facilities, systems, and methods for identifying the degree of seriousness and potential scope of radiological consequences of emergency situations within and outside the site boundary, including capabilities for dose projection using real-time meteorological information and for dispatch of radiological monitoring teams within the EPZs; and a preliminary analysis reflecting the role of the onsite technical support center and of the near-site emergency operations facility in assessing information, recommending protective action, and disseminating information to the public.

III. The Final Safety Analysis Report

The Final Safety Analysis Report shall contain the plans for coping with emergencies. The plans shall be an expression of the overall concept of operation; they shall describe the essential elements of advance planning that have been considered and the provisions that have been made to cope with emergency situations. The plans shall incorporate information about the emergency response roles of supporting organizations and offsite agencies. That information shall be sufficient to provide assurance of coordination among the supporting groups and with the licensee.

The plans submitted must include a description of the elements set out in Section IV for the Emergency Planning Zones (EPZs)[2] to an extent sufficient to demonstrate that the plans provide reasonable assurance that adequate

[2] Regulatory Guide 2.6 will be used as guidance for the acceptability of research and test reactor emergency response plans.

protective measures can and will be taken in the event of an emergency.

IV. Content of Emergency Plans

The applicant's emergency plans shall contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below, i.e., organization for coping with radiation emergencies, assessment action, activation of emergency organization, notification procedures, emergency facilities and equipment, training, maintaining emergency preparedness, and recovery. In addition, the emergency response plans submitted by an applicant for a nuclear power reactor operating license shall contain information needed to demonstrate compliance with the standards described in Section 50.47(b), and they will be evaluated against those standards. The nuclear power reactor operating license applicant shall also provide an analysis of the time required to evacuate and for taking other protective actions for various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations.

A. Organization

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:

1. A description of the normal plant operating organization.

2. A description of the onsite emergency response organization with a detailed discussion of:

a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency;

b. Plant staff emergency assignments;

c. Authorities, responsibilities, and duties on an onsite emergency coordinator who shall be in charge of the exchange of information with offsite authorities responsible for coordinating and implementing offsite emergency measures.

3. A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite emergency organization.

4. Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making offsite dose projections, and a description of how these projections will be made and the results transmitted to State and local authorities, NRC, and other appropriate governmental entities.

5. Identification, by position and function to be performed, of other employees of the licensee with special qualifications for coping with emergency conditions that may arise. Other persons with special qualifications, such as consultants, who are not employees of the licensee and who may be called upon for assistance for emergencies shall also be identified. The special qualifications of these persons shall be described.

6. A description of the local offsite services to be provided in support of the licensee's emergency organization.

7. Identification of, and assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies.

8. Identification of the State and/or local officials responsible for planning for, ordering, and controlling appropriate protective actions, including evacuations when necessary.

B. Assessment Actions

The means to be used for determining the magnitude of and for continually assessing the impact of the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety. The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring. These emergency action levels shall be discussed and agreed on by the applicant and State and local governmental authorities and approved by NRC. They shall also be reviewed with the State and local governmental authorities on an annual basis.

C. Activation of Emergency Organization

The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described. The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described. Emergency action levels (based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, such as the pressure in containment and the response of the Emergency Core Cooling System) for notification of offsite agencies shall be described. The existence, but not the details, of a message authentication scheme shall be noted for such agencies. The emergency classes defined shall include: (1) notification of unusual events, (2) alert, (3) site area emergency, and (4) general emergency. These classes are further discussed in NUREG-0654; FEMA-REP-1.

D. Notification Procedures

1. Administrative and physical means for notifying local, State, and Federal officials and agencies and agreements reached with these officials and agencies for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described. This description shall include identification of the appropriate officials, by title and agency, of the State and local government agencies within the EPZs.

2. Provisions shall be described for yearly dissemination to the public within the plume exposure pathway EPZ of basic emergency planning information, such as the methods and times required for public notification and the protective actions planned if an accident occurs, general information as to the nature and effects of radiation, and a listing of local broadcast stations that will be used for dissemination of information during an emergency. Signs or other measures shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an accident occurs.

3. A licensee shall have the capability to notify responsible State and local governmental agencies within 15 minutes after declaring an emergency. The licensee shall demonstrate that the State/local officials have the capability to make a public notification decision promptly on being informed by the licensee of an emergency condition. By February 1, 1982, each nuclear power reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ. The four-month period in 10 CFR 50.54(s)(2) for the correction of emergency plan deficiencies shall not apply to the initial installation

of this public notification system that is required by February 1, 1982. The four-month period will apply to correction of deficiencies identified during the initial installation and testing of the prompt public notification systems as well as those deficiencies discovered thereafter. The design objective of the prompt public notification shall be to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this notification capability will range from immediate notification of the public (within 15 minutes of the time that State and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the State and local governmental officials to make a judgment whether or not to activate the public notification system. Where there is a decision to activate the notification system, the State and local officials will determine whether to activate the entire notification system simultaneously or in a graduated or staged manner. The responsibility for activating such a public notification system shall remain with the appropriate government authorities.

E. Emergency Facilities and Equipment

Adequate provisions shall be made and described for emergency facilities and equipment, including:

1. Equipment at the site for personnel monitoring;

2. Equipment for determining the magnitude of and for continuously assessing the impact of the release of radicactive materials to the environment;

3. Facilities and supplies at the site for decontamination of onsite individuals;

4. Facilities and medical supplies at the site for appropriate emergency first aid treatment;

5. Arrangements for the services of physicians and other medical personnel qualified to handle radiation emergencies onsite;

6. Arrangements for transportation of contaminated injured individuals from the site to specifically identified treatment facilities outside the site boundary;

7. Arrangements for treatment of individuals injured in support of licensed activities on the site at treatment facilities outside the site boundary;

8. A licensee onsite technical support center and a licensee near-site emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency;

9. At least one onsite and one offsite communications system; each system shall have a backup power source.

All communication plans shall have arrangements for emergencies, including titles and alternates for those in charge at both ends of communication links and the primary and backup means of communication. Where consistent with the function of the governmental agency, these arrangements will include:

a. Provision for communications with contiguous State/local governments within the plume exposure pathway EPZ. Such communications shall be tested monthly.

b. Provision for communications with Federal emergency response organizations. Such communications systems shall be tested annually.

c. Provision for communications among the nuclear power reactor control room, the onsite technical support center, and the near-site emergency operations facility; and among the nuclear facility, the principal State and local emergency operations centers, and the field assessment teams. Such communications systems shall be tested annually.

d. Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, the onsite technical support center, and the near-site emergency operations facility. Such communications shall be tested monthly.

F. Training

The program to provide for (1) the training of employees and exercising, by periodic drills, of radiation emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties and (2) the participation in the training and drills by other persons whose assistance may be needed in the event of a radiation emergency shall be described. This shall include a description of specialized initial training and periodic retraining programs to be provided to each of the following categories of emergency personnel:

a. Directors and/or coordinators of the plant emergency organization;

b. Personnel responsible for accident assessment, including control room shift personnel;

c. Radiological monitoring teams;

d. Fire control teams (fire brigades);

e. Repair and damage control teams;

f. First aid and rescue teams;

g. Medical support personnel;

h. Licensee's headquarters support personnel;

i. Security personnel.

In addition, a radiological orientation training program shall be made available to local services personnel,

e.g., local emergency services/Civil Defense, local law enforcement personnel, local news media persons.

The plan shall describe provisions for the conduct of emergency preparedness exercises as follows: Exercises shall test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communication networks, test the public notification system, and ensure that emergency organization personnel are familiar with their duties.[3]

1. A full participation[4] exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located for which the first operating license for that site is issued after July 13, 1982. This exercise shall be conducted within 1 year before the issuance of the first operating license for full power and prior to operation above 5% of rated power of the first reactor, and shall include participation by each State and local government within the plume exposure pathway EPZ and each State within the ingestion exposure pathway EPZ.

2. Each licensee at each site shall annually exercise its emergency plan.

---

[3] Use of site specific simulators or computers is acceptable for any exercise.

[4] "Full participation" when used in conjunction with emergency preparedness exercises for a particular site means appropriate offsite local and State authorities and licensee personnel physically and actively take part in testing their integrated capability to adequately assess and respond to an accident at a commercial nuclear power plant. "Full participation" includes testing the major observable portions of the onsite and offsite emergency plans and mobilization of State, local and licensee personnel and other resources in sufficient numbers to verify the capability to respond to the accident scenario.

3. Each licensee at each site shall exercise with offsite authorities such that the State and local government emergency plans for each operating reactor site are exercised biennially, with full or partial participation [5] by States and local governments, within the plume exposure pathway EPZ. State and local governments that have fully participated in a joint exercise since October 1, 1982, are eligible to fully participate in emergency preparedness exercises on a biennial frequency. The level of participation shall be as follows:

(a) A State shall at least partially participate in each offsite exercise at each site.

(b) A State shall fully participate in at least one offsite exercise every 2 years.

(c) At least once every 7 years, all States within the plume exposure pathway EPZ for a given site must fully participate in an offsite exercise for that site. This exercise must also involve full participation by local governments within the plume exposure pathway EPZ.

(d) Partial participation by a local government during an offsite exercise for a site is acceptable only when the local government is fully participating in a biennial exercise at another site.

(e) Each State within any ingestion exposure pathway EPZ shall exercise its plans and preparedness related to ingestion exposure pathway measures at least once every 5 years.

(f) Licensees shall enable any State or local government located within the plume exposure pathway EPZ

---

[5] "Partial participation" when used in conjunction with emergency preparedness exercises for a particular site means appropriate offsite authorities shall actively take part in the exercise sufficient to test direction and control functions; i.e., (a) protective action decision making related to emergency action levels, and (b) communication capabilities among affected State and local authorities and the licensee.

to participate in annual exercises when requested by such State or local government.

4. Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot find reasonable assurance that adequate protective measures can be taken in the event to a radiological emergency. The extent of State and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.

5. All training, including exercises, shall provide for formal critiques in order to identify weak or deficient areas that need correction. Any weaknesses or deficiencies that are identified shall be corrected.

G. Maintaining Emergency Preparedness

Provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date shall be described.

H. Recovery

Criteria to be used to determine when, following an accident, reentry of the facility would be appropriate or when operation could be resumed shall be described.

V. Implementing Procedures

No less than 180 days prior to scheduled issuance of an operating license for a nuclear power reactor or a license to possess nuclear material, one copy of the applicant's detailed implementing procedures for its emergency plan shall be submitted to the Administrator of the appropriate NRC Regional Office, specified in Appendix D of Part 20 of this chapter and two copies are

to be sent to the Document Control Desk, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Licensees who are authorized to operate a nuclear power facility shall submit one copy of any changes to the emergency plan or procedures to the Administrator of the appropriate NRC Regional Office, specified in Appendix D, 10 CFR Part 20, and two copies to the Document Control Desk within 30 days of such changes.

[Appendix E as added December 11, 1970, effective January 22, 1971 (35 F. R. 19567); amended effective January 11, 1973 (38 F. R. 1271); amended August 19, 1980, effective November 3, 1980 (45 F. R. 55402); officially corrected May 29, 1981 (46 F. R. 28838); amended effective December 30, 1981 (46 F. R. 63031); amended effective July 13, 1982 (47 F. R. 30232); amended effective December 28, 1982 (47 F. R. 57670); amended July 6, 1984, effective August 6, 1984 (49 F. R. 27733).]